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SCHOOL OF EDUCATION

Thesis

THE MUSIC INDUSTRIES OF BOSTON AND THEIR CONTRIBUTION TO THE ADVANCEMENT OF THE ART OF MUSIC IN THE UNITED STATES

Submitted by

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(A.B., Boston University, 1916)
(M.S., Simmons College, 1924)

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1932

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A C K N O W L E D G E M E N T S

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INTRODUCTION.

Aim of This Paper.

Music is largely dependent for its development on the preservation of its literature through printing and on progress in the making of the instruments by which it can be played. The aim of this study is to bring out what the music industries of Boston have done in these fields.

Their contributions are largely of four types -

Pioneering efforts.

Unique features of products, such as materials used.

Improvements in method and in construction of products,

both

Unpatented improvements and

Patented inventions.

Special services to promote the art of music, such as —

Personal activities of the personnel,

Financial aid,

Erection of concert halls.

Sources of Information.

The information for this paper has been obtained from two sources, readings and interviews. A bibliography of the readings is appended. The sixty-one personal interviews, largely with the heads of business houses or music departments, are summarized as follows -

Publishers	18
Music Loaning library	1

Engravers and printers	5
Piano Manufactures and dealers	7
Piano tuners	2
Organ builders	4
Violin makers	13
Flute, piccolo and clarinet makers	4
Band and miscellaneous instrument makers	3
Band leader	1
Woodwind dealers	2
Music string makers	1

I. MUSIC PUBLISHING - VOCAL AND INSTRUMENTAL.

A. The Pioneers and Early Publishers.

Boston's contribution to the development of music in the United States through the publishing field began just ten years after its settlement. Although the Puritans of New England were opposed to music in general, the hymn book for church singing, which was also the first book issued in the Colonies with the exception of an almanac, was the Bay Psalm Book printed in 1640. 1. Until the ninth edition in 1698, which contained thirteen tunes in two-part harmony, no music was included, however. "This crudely printed book, without bars except at the end of each line is the oldest existing music of American imprint."1. The notes were cut on wood.

The first American instruction book on the art of singing, "A very plain and easy Introduction to the Art of Singing Psalm Tunes", issued in 1712 or 1714, was compiled by Rev. John Tufts, a clergyman of Newburyport, Massachusetts, not far from Boston.2. This substituted letters for notes.

In 1721 Rev. Thomas Walter of Roxbury, now a part of Boston, compiled "The Grounds and Rules of Music Examined or an introduction to the art of singing by note". This was "the first practical American instruction book", and is said to be the first music printed with bar lines. 3.

1.) See Fisher, William Arms - Notes on Music in Old Boston, p.3

2.) Ibid. p. 6.

3.) Ibid. p. 7.

It was issued from the press of J. Franklin when his brother Benjamin, a lad of fifteen, was his apprentice in the printers trade.

In Colonial times and later musicians and artists were not specialized in their skill as now. This is well illustrated by Josiah Flagg who was a psalmodist, compiler and publisher of "A Collection of Best Psalm Tunes in Two, Three and Four Parts" issued in 1764, and a concert manager of vocal and instrumental music both sacred and secular. He included in his programs works of Bach and as early as 1771 of handel, who had been a dominating influence of English musical life since about 1717. His volume of about eighty pages was the largest collection printed in New England up to this time. "It is notable in that for the first time light music was intermingled with Psalm Tunes and because the music was engraved by the noted silversmith Paul Revere, and further that it was printed on paper made in the Colonies ". 1.

Josiah Flagg also introduced the London organist and composer William Selby who was largely responsivle for the rapid progress of music in Boston after his arrival about 1771. 2.

The year of Beethoven's birth, 1770, saw the publication of compositions by our first real American composer, William Billings. It was "The New England Psalm Singer," which contained fuguing pieces and primitive attempts at counterpoint.

1.) Fisher, Williams Arms - Notes on Music In Old Boston, p. 10

2.) Howard, John Tasker - Our Contemporary American Music, p. 64

This book of 108 pages, 120 tunes, several anthems, 22 pages of elementary instruction and an essay on the nature and properties of musical sound was printed in Boston by Edes and Gill. 1. "Thus 140 years after the founding of Boston the first book of native music was issued and with it the publication of American composition may be said to begin". 2.

Another important compilation. "Laus Deo! The Worcester Collection of Sacred Harmony", was printed from movable types at Worcester, Mass., by Isaiah Thomas, first edition in 1788. This printer advertised in the Boston Independent Chronicle of January 26, 1785, that specimens of his new types were to be seen in Battelle's Boston Book Store, State Street. 3. In general, aside from this and other collections of Billings' compositions, publications of music were rare before the nineteenth century. 4.

Dedham, near Boston, was early a musical centre. In 1807 the firm of H. Mann there printed and published O. Shaw's "For the Gentlemen: A Favorite Selection of Instrumental Music for Schools and Musical Societies".

Previous to this all books were printed from the type, for the art of stereotyping which was invented about 1725 did not begin to come into general use until 1810, and was first introduced into America about 1813." 4.

1.) Gilson, F. H. Company - Music Book Printing, P.5
2.) Fisher, William Arms,- Notes on Music in Old Boston p. 11
3.) Fisher, William Arms - Notes on Music in Old Boston, p.14
4.) Gilson, F. H. Company - Music Book Printing. p.6

"Publications of sheet music began as early as 1768 as an advertisement in the Boston Chronicle of October 17th shows." 1. The publication of secular music started in Boston and Philadelphia in 1789, much being patriotic or echoing passing events. Boston exceeded the rest of the country in sacred music and Dedham, Newburyport, Salem, Northampton and Worcester added their share. English music reprinted consisted chiefly of songs of Hook, Dibdin, Shield and Storace and representations of Haydn, Gluck, Pleyel, Mozart and Handel. 1.

1.) Fisher, W. A. - Notes on Music in Old Boston, p. 18.

B. Nineteenth and Early Twentieth Century Publishers Out of Existence.

As it is difficult to obtain information concerning publishers no longer in existence the material in this section is rather fragmentary.

Johann Christian Gottlieb Graupner, like Josiah Flagg, was a versatile musician. He was a player of all known instruments, oboe and double bass being his favorites, an eminent teacher of pianoforte and all orchestral instruments, a conductor of the Federal Street Theatre orchestra, a co-organizer and organist of the Handel and Haydn Society and organizer in 1810 of the Philharmonic Society.

In addition to all these activities, he composed, engraved, and printed his own and others' compositions at his Musical Academy, 6 Franklin Street, Boston from about 1800-1820. He was a pioneer in compiling educational works for the pianoforte. In 1819 he wrote and published "Rudiments of the Art of Playing the Pianoforte, containing the elements of music" and "remarks on fingering with examples, thirty fingered lessons and a plain direction for tuning".

Other early distinguished musicians who were also publishers include:

Peter Albrecht von Hagen, Senior,1. (born in Holland 1750? died in Boston October 1803) who came to Boston in 1796.

1.) Boston Music Directory 1929, Significant Names in Boston's Musical History - A Roll of Honor - p. 9.

He was leader of the orchestra at Haymarket Theatre, opened a musical academy, had a music shop and published music.

Peter Albrecht von Hagen, Junior, 1. (born in Holland 1781, died in Boston 1837.) He was a pianist, composer, teacher and publisher, first with his father as P. A. von Hagen & Company, and after November 1800 alone as P. A. von Hagen, Junior.

Francis Mallet 1. (born in France 1700? died in Boston 1800?) who came to the United States with Lafayette. He settled in Boston in 1793, and was a composer, singer, violinist, organist and pioneer publisher of music.

Charles Edward Horn 1. (born in London 1786, died in Boston 1849) who came to America in 1833 and to Boston in 1847 as conductor of the Handel and Haydn Society. He was a composer, opera singer, conductor and publisher.

G. P. Reed had a music store and published music at 17 Tremont Row before 1847 till about 1860. There Mr. P. J. Healy of Lyon & Healy got his start, rising from errand boy to bookkeeper and confidential clerk. 2. In 1856 Dwight's Music Journal speaks of this firm as "one of our three leading publishers" all of whom seem anxious to identify their names with the best list of works that have an enduring value.[3] The new publications sent to it by this

1.) Boston Music Directory 1929, Significant Names in Boston's Musical History - A Roll of Honor - p. 9.
2.) A Hundred Years of Music in America. p. 340
3.) Dwight, John S. - Journal of Music, March 22, 1856 pp. 198 & 199.

firm for review, included works of Czerny, Baumbach, Cramer, Rossini, Meyerbeer, Mozart, Beethoven and American composers.

The firm of Elias Howe, founded in the first half of the nineenth century, had a music store, selling music and instruments, especially orchestral, until its close in 1931. This company also published music mostly orchestral, including marches more popular than classical, and sold largely to professional musicians.

The firm of Nathan Richardson started in 1854 at 282 Washington Street. It was described in 1856 by Dwight's Music Journal as "the youngest but not least enterprising", 1. of our (Boston's) three leading music publishers. 2. The first publication mentioned was a new edition of the "Modern School for the Piano." The editor commented that this "seems to have taken its place as a standard work." A small instruction book, "First Book for the Pianoforte" by A. LeCarpentier, Professor of Music in the Paris Conservatoire, was stated to be "expressly for beginners and is extensively used in Europe." The other publications were a"Manual of Harmony" by J. C. D. Parker and "Twelve Sonatas for the Piano" by Muzio Clementi. Apparently this company was not in business long as the only Richardson firm listed in 1857 as publishing music was Russel & Richardson at 291 Washington Street.

1.) Dwight, J. S. - Journal of Music, March 22, 1856, pp. 198 & 199.

2.) The Oliver Ditson Company was the third firm.

In 1858 this had apparently become Russell & Fuller.

Thompson (C. W.) and Odell (Ira H.) started a music store and publishing business in 1878 at 86 Tremont Street. They also began manufacturing musical instruments around 1888 when they were located at 578 Washington Street. They first made mandolins and guitars and repaired bow stringed instruments. Mr. Odell was a flutist and Mr. Thompson a good cornet player. Probably because of these interests they also added the manufacture of good brass instruments. Their publishing gradually ceased and Carl Fischer 1. purchased their catalogs of fretted instrument , band and orchestral music about thirty years ago. About 1905 the Vega Company took over their manufacturing interests.

Miles and another C. W. Thompson started a publishing business at 13 West Street about 1890. Later the firm became C. W. Thompson & Co., which was located at A. & B. Park Street in 1910, at 2 Park Street in 1920 and finally at 77 Providence Street in 1925. This company had a general catalog of vocal, piano and instrumental compositions, more light than classical in type and mainly by local composers. This was taken over by the Boston Music Company in 1925.

Herbert F. Odell, son of Ira H. Odell, began publishing music at 165 Tremont Street about 1905 as H. F. Odell & Company. This firm's catalog of music, largely for fretted instruments, and its trade journal, "Crescendo," were taken over by the Vega Company about 1925.

1.) Statements of Mr. Walter Jacobs and Mr. Thomas M. Carter.

In the latter part of the century the J. B. Millet Company published the classical type of music, vocal, pianoforte, organ and orchestral. Their books, "Half Hours with the Best Composers" edited by Karl Klauser, were published in 1894. "The Universal Library of Music" first copyrighted in 1894, had an introduction by George Proctor of the New England Conservatory. This contained "Graded Masterpieces in Composition" and copyright piano works of such American composers as Lowell Mason, Reginald DeKoven, Richard Hoffman, Edward MacDowell, Arthur Whiting, George Chadwick, Arthur Foote, Margaret Lang, Ethelbert Nevin, Horatio Parker, Edgar Kelley. The rights to both publications were taken over in 1910 by the Musician's League of America.

They also published "Famous Composers and Their Music" edited by Theodore Thomas, John Knowles Paine and Karl Klauser. The 1891 and 1894 editions were both in three volumes. The "1901 Extra Edition" consisted of sixteen volumes. Six of these contained biographies and discussion of the music of masters of the Netherland, Italian, German, French, Russian, Polish, Norwegian, English and American Schools. They were illustrated with pictures of the composers and beautiful colored illustrations of rare and valuable old instruments. The writeups were by such Americans as Mrs. Ole Bull, John S. Dwight, W. S. B. Mathews, H. M. Ticknor, Louis C. Elson, Henry E. Krehbiel, Arthur Foote and Philip Hale; by such English people as Mrs. Julian Marshall and Edward Dannreuthers; by such Frenchmen as Adolphe Jullien and Arthur Pougin; and such Germans as Wilhelm Langhaus and Philipp Spitta. The remaining volumes contained selected music of these famous composers.

Some other publishers of the later nineteenth century were -

Jean White (decade 1870 to decade 1910) reprints of European works.

G. D. Russell before 1877, classical European music. The catalog and goodwill of this company was purchased by Oliver Ditson Company in 1877.[1]

William F. Gerrish l. on West Street from about 1890 till after 1910, apparently after giving up reed organ making, one of the best and finest publishers of the old school. His catalog of octavo music was for Masonic choral music, in which order he was greatly interested. This is still in the possession of some of his family. One of his best selling octavo numbers was his arrangement of "Still, still with Thee when Purple Morning Breaketh."

H. B. Stevens & Company [2]. on Boylston Street about 1890, high class line of music publications. One of his best selling numbers was a song by Charles Dennée, "Sleep, Little Baby of Mine." He got into financial difficulties and his catalog was bought by - Theodore Presser?

Bates & Guild, piano classics.

Ernest S. Williams, a cornetist; band, orchestra and popular music.

1.) Fisher, William Arms - Notes on Music in Old Boston, p. 11.
2.) Information supplied by Mr. Small of John Worley.

The Wa Wan Press[1.] was founded in 1901 at Newton, Massachusetts, by Arthur Farwell who sold it in 1912 to G. Schirmer of New York.

Mr. Farwell's avowed aim was "to issue unsalable works by American composers whatever their tendencies and artistic affiliations," especially "any music that developed in interesting fashion any folk music to be found on American soil." [2.]

To finance and secure a regular distribution subscribers were solicited to receive in periodical form the publications of the Press issued quarterly each year. This same plan has been followed by the Society for the Publication of American Music.

The contributions of this Press were two fold, they helped to awaken interest in our American folk songs, and they also helped to launch a number of Mr. Farwell's fellow composers, including Henry F. Gilbert, Edgar Stillman Kelley and Harvey Worthington Loomis.

1.) For the following information see Tasker, John Howard - Our American Music. pp 439, 441, 442, & 621.

2.) Ibid p.439.

C. Present Day Publishers.

Most of the publishers discussed in this section are issuing more or less music which can be considered educational in the sense that it is of a type tending toward a taste for finer music, although it may be more recreational than strictly intellectual. Hence the term educational music publishers is used here to connote publishers of music designed for school and college use.

The group "General Music Phblishers" consists of those firms publishing practically all types of music both vocal and instrumental. In the group "Special Music Publishers" are included those who so far have specialized in only a few types of music.

1. General Music Publishers.

Oliver Ditson Company.

The pinneer and one of the foremost publishing houses of the present day in the United States is the Oliver Ditson Company. Through the Boston Book Store of Colonel Ebenezer Battelle, opened in 1783 and its successors, Colonel Parker and his music store connections, this Company had its roots as far back as 1783 although it was not until 1835 that Mr. Oliver Ditson began to publish and copyright music at 107 Washington Street.

The founder of this house was born in Boston in 1811 and died in 1888. When a lad of thirteen he entered the service of

Samuel H. Parker, a publisher, becoming in 1824 a partner of the firm Parker and Ditson. In 1842 Mr. Ditson acquired the interest of Mr. Parker who withdrew all connection in 1856.

Oliver Ditson's seven years' training as a printer with Colonel Parker, Isaac R. Butts, the publisher of the North American Review, and Alfred Mudge, successively, together with his fondness for music, and perhaps his friendship with the Graupner family, who were neighbors, led to his publishing for himself in 1835.[1.]

Mr. John C. Haynes, who was president of the company from 1889 to 1907, entered Mr. Ditson's employ as an office boy in 1845, When he was admitted to the firm in 1847 it assumed the name of Oliver Ditson and Company.

As the business grew Mr. Ditson's friend John Henry Howard Graupner, who had been taught music engraving by his father Gottlieb Graupner, was in charge of the music printing and engraving department from 1850 or earlier to 1888.

In 1860 Mr. Ditson established John Church, a young man with him from boyhood, in Cincinnati and sold his interest to him in 1871. This is the now well known John Church Company " preeminent for high grade classical and standard music,"[2.] with four branches located in New York, Chicago, Leipsic and London.

1.) For complete tracing of this history see William Arms Fisher's book, Notes on Music in Old Boston, pp.21-35.

2.) American History and Encyclopedia of Music, The Music Trades p. 342.

In 1864 the firm of Lyon and Healy was established in Chicago by Mr. Ditson. This company has been the Chicago agent of the Ditson Company ever since.

The New York Branch of Oliver Ditson and Company with Charles W. Ditson as head was established in 1867 after the purchase of the music plates, stock and goodwill of Firth, Son and Company. By purchase two other catalogs and businesses were added, namely that of William Hall and Son in 1875 and of J. L. Peters in 1877.

The Philadelphia Branch started in 1875 with the purchase of the catalog of Lee and Walker. The stock of music and plates of G. Andre and Company were purchased in 1879 and the entire catalog, stock and music plates of F. A. North and Company in 1890. This Branch, of which James Edward Ditson was in charge until his death in 1881, was discontinued in 1910.

The Ditson store soon became the centre of Boston's musical life and Mecca of music lovers and professionals, especially before Mr. Ditson moved to an upstairs office. To music publishing and selling an instrumental department was added for the sale of pianofortes and all kinds of orchestral instruments. This started as the John C. Haynes Company, a separate business at a different address, and was later amalgamated with the Oliver Ditson Company. Generally speaking the instruments carried were made by other manufacturers.

In 1930 the retail store of the Ditson Company at 178-9 Tremont St. was closed out, while the catalog and publishing business

was purchased by Theodore Presser Company of Philadelphia. This is in line with the trend to consolidation of large business everywhere. At the present time the publishing business of each company is run autonomously with Mr. William Arms Fisher in charge of the policies of the Oliver Ditson Company, as Vice-President and Publicity Manager at 359 Boylston Street.

Some idea of the volume of publications of a large publishing house can be gained from the following figures for 1932 supplied by Mr. Fisher. The total catalog of the Company is 20,295 which is distributed as follows -

Text books, musical literature, operas, operettas and collections - vocal, choral and instrumental - 2600

Piano music . . . . . - 5121

Organ music . . . . . - 370

Violin and other stringed instruments . . . . . - 587

Orchestra . . . . . - 767

Band . . . . . - 451

Vocal music . . . . . - 3461

Octavo music . . . (Choir and Choral) . . . . . - 6916

The octavo catalog of sacred and secular songs for men's women's and mixed voices is the largest in the United States. Much school music and many publications for children are included in the catalog.

With such a tremendous list of publications it is impossible to estimate the influence of this company for the advancement of music not only in the United States but also in the whole world.

The following were selected and described by Mr. Fisher as being unique and outstanding among their publications.

The "Music Students Library" was started over thirty years ago with one volume in 1897. Since then other volumes have been added, making a total of forty. This series of educational text books includes every essential branch of musical instruction, as pianoforte, organ, violin, voice, ear training, harmony, counterpoint, form, instrumentation, acoustics, conducting, history, appreciation and definitions. These works have been prepared by experts in these different fields of music such as Professor Clarence G. Hamilton of Wellesley, Mary Venable, Arthur Edward Heacox, Sir John Stainer, Gustav Strube, Heinrich Wohlfahrt translated by John S. Dwight, Ernst Pauer, Percy Goetschius, Karl W. Gehrkens.

"The Musicians Library" started in 1903 is a series of anthologies without parallel in America or Europe. These hundred volumes were planned to embrace all the masterpieces of song and piano literature. They were edited by the best authorities who could be had, as the following illustrations will show -

Composer	Editor
Bach	Ebenezer Prout
Beethoven	Eugen d'Albert
Mozart	Carl Reinecke
Mendelssohn	Percy Goetschius
Schumann (piano works)	Xaver Scharwenka

Anthology of French piano music	Isidor Philipp
Anthology of German piano music	Moritz Mosskowski
Franck	Vincent D'Indy
Brahms (Songs)	James Huneker
Franz	William Foster Apthorp
Negro Melodies	S. Coleridge Taylor
English Folk Songs	Cecil J. Sharp
English Songs	Granville Bantoff
French Folk Songs	Julien Tiersot
Modern French Songs	Philip Hale
Opera Songs	Henry Krehbiel

The first publication of a method of class instruction was "Mitchell's Class Methods" for the violin issued in 1912. This was based on the pioneer experiences of Dr. Albert G. Mitchell in teaching violin classes in the Boston Public Schools. Boston in 1868 had been the leader in introducing music into the public schools under the guidance of Lowell Mason. Again under Dr. Mitchell's leadership it was the pioneer in initiating the now generally adopted class instruction movement. Later the Company published Dr. Mitchell's books of class instruction methods for viola, clarinet, cornet and slide trombone, Bornschein's methods for violoncello and T. P. Giddings' pioneer methods for pianoforte.

In 1915 the first volume of the "Famous Singers Series," another unique publication, appeared. These were books of favorite selections of famous singers like Julia Culp, Geraldine Farrar, Alma Glück, Marcella Sembrich and Emma Calvé.

In 1918 "the Music Students Piano Course," the first of its kind on a large scale, was issued. Experts in this field of music, Clarence G. Hamilton, Dr. John P. Marshall, Will Earhart, Dr. Percy Goetschius and William Arms Fisher comprised the board of editors. This was designed as a series of text boods for a five-year course of music study for the average intelligent person at the time when the granting of school credit for private pianoforte study made a standard necessary as a basis for granting it. It was the first course of this type issued by a music publisher "without any strings attached." It has been adopted by the National Federation of Music Clubs as the standard course of study for pianoforte.

Another unique publication is the "Philharmonic Orchestra Series," the first series of orchestral compositions issued in the United States with full orchestral score. It was started in 1921 because of the development of school music.

The "Course of Study in Music Understanding" which appeared in 1924 is unique in being the first and only series of correlated books on this subject. It planned to cover five years of study as follows.

Year	Subject	Author
First year	The Fundamentals of Music	Karl W. Gehrkens
Second "	From Song to Symphony	Daniel Gregory Mason

Year	Subject	Author
Third year	Musical Instruments	Edgar Stillman Kelley
Fourth "	Epochs in Musical Progress	Clarence G. Hamilton
Fifth "	Masters of the Symphony	Percy Goetschius

"The Symphonic Band Series," edited by N. Clifford Page, Mayhew L. Lake and Richard L. Halle , was started in 1926 and now consists of ten volumes for school use.

"The Analytic Symphony Series" edited by Dr. Percy Goetschius began in 1927. This series of fifty volumes has no duplicate in Europe or America. Its object is to provide playable two-hand piano scores of the great symphonies, symphonic poems and overtures with analytical notes on the structure and orchestration, notes on the significance of the composition and its salient points and a brief biography of the composer. Some works are first published for two hands in this series, for example D'Indy's B Flat Symphony, Saint Saens' C Minor Symphony and Sibelius' E Minor Symp ony.

"The Pocket Music Student Series" started in 1927 was aimed to give music students and lovers needed information on such points as musical terms, noted names in music, listening, pianoforte technic, sight singing, conducting, etc.

Among other publications are operettas, cantatas and the Oliver Ditson Series which contains many works of master composers and songs which are general favorites planned for the moderately filled purse, and the "New Fifty Cent Series" planned to serve a similar purpose.

"The Ditson Edition" contains upwards of three hundred standard educational works for the pianoforte, organ, violin, violoncello, and voice.

These publications with their authors and editors themselves bespeak the great contribution made by the Oliver Ditson Company to the advancement of music throughout the musical world.

White-Smith Music Publishing Company

This company was organized in 1867 as White, Smith and Perry by Clarence A. White to publish music, because as a composer he found that it was difficult for Americans to get their works published. He wrote and published about a thousand compositions including the song "Marguerite of Long Ago," so popular in its day that over one million copies of it have been sold.

This firm was one of the earliest to specialize in engraving, printing and binding as this phase of the business was started a few years after its establishment. The firm's contribution in this field will be discussed under the heading "Engraving and Printing."

For a while after its establishment this company had a retail store also, in which pianofortes and other instruments were sold.

The firm was changed from White, Smith and Perry to White-Smith Music Publishing Company in 1873 and incorporated in 1897. It is now located in its own building, which has large fireproof vaults, at 40 Winchester Street.

The White-Smith Music Publishing Company has a large, varied catalog of publications of the better grade, such as reprints of standard works of master composers, original works of some well-known American composers, methods and vocal school music. The kinds of music published include—

Pianoforte Music Catalog.

"Graded Teaching Pieces for Piano" by such modern composers as Charles Wakefield Cadman, H. N. Redman, G. Marschal-Loepke.

Organ Catalog, which Mr. C. A. White states is considered good.

Violin Catalog.

Vocal Sacred and secular music—

Song Catalog,

Sacred Songs with various accompaniments,

A Catalog for the Catholic Service,

The Church Choir Year - anthems, operettas, cantatas, etc. mostly by American composers,

Patriotic and Memorial Occasions Catalog,

Secular Octavo Music Catalog which is well-known. [1.]

Their special features are their "Teacher's Library," "Edition White-Smith" and the "Stanhope Edition of School Music."

The "Teacher's Library" is a collection of original exclusive copyright educational and recreational works chiefly for pianoforte, organ, violin, flute method and voice.

1.) Mr. C. A. White's statement

"Edition White-Smith" consists of over three hundred reprints of standard instruction works - methods, studies, exercises and recreations for pianoforte, organ, violin, violoncello, double bass, mandolin, guitar, clarinet, cornet, flute and voice. In the pianoforte group appear such names as Bach, Beethoven, Brahms, Clementi, Cramer, Czerny, Grieg, Heller, Wolff, Moszowski; in the violin group de Beriot, Kayser, Kreutzer, Mazas, Wohlfahrt; in voice Concone, Sieber, and Vaccai.

The "Stanhope Edition" of nearly three hundred numbers contains a graded series of supplementary school music books by Frederick H. Ripley, formerly headmaster of a Boston School, and Harry L. Harts. Thses books contain exercises as well as songs and are specially arranged to suit the range of children's voices. Much of the music is original.

The books were issued as follows -

1907 Song Development for Little Children, kindergarten and elementary grades.

1917 Song Development I for same grades, accompanied and unaccompanied.

1928 Song Development II for grade three, unaccompanied.

1929 Song Development III for grade four, unaccompanied.
Unison Choruses for high and intermediate schools.
Songs and Choruses for high schools.

The Edition also includes unisons, two, three, and four part songs for unchanged voices, male quartets, choruses, music for special occasions and violin music for schools arranged, bowed, cued and fingered by Dr. Albert G. Mitchell.

Starting as it did, the fostering of American composers and promotion of their works has always been an aim of this Company. Its contribution in this line has been the publishing of the principal works of Charles Wakefield Cadman, the band fundamentals of Carl Weber, and some works of Geoffrey O'Hara, Bruno Huhn, Gertrude Ross, a western composer, Charles Huerter, and H. N. Redman.

The Arthur P. Schmidt Company.

This publishing house which has won an international reputation was founded by Arthur P. Schmidt, a German of Prussian stock, born in Hamburg, April 1, 1846. He hated Prussianism so much that he came to the United States when he was twenty years old.

He worked first in J. M. Russel's store on West Street, Boston. When he established his own business in October 1876, he made a specialty of importing works of foreign composers. He gradually began publishing the works of American composers, so that he has been called "Pioneer Publisher of American Music." This firm located at 120 Boylston Street., has had a New York branch almost from its start and one in Leipzig since before 1908. Mr. Schmidt died May 5, 1921.

The varied catalog of this firm now comprises vocal, choral (including cantatas and operettas), pianoforte, organ, violin, orchestral music, and theory and harmony, history and appreciation books by Stephen A. Emery, Arthur Foote, Arthur E. Heacox, Walter E. Spalding, Thomas Tapper and Edward MacDowell.

Their major feature of the present day, "Schmidt's Educational Series," was started about 1910 to gather together a representative

set of educational works all copyrighted as original material or editions. The pianoforte collection is its strongest feature and the violin collection is good.[1.)] It also includes organ, violoncello, orchestral and vocal compositions. This last collection has so far been the least developed. It includes however, Colonial and Early American music by pioneer song composers. This Series was appraised by Musical America as follows - "No series of educational music published in America deserves warmer commendation than" Schmidt's Educational Series."

The Boston group is especially indebted to Mr. Schmidt for his early recognition of their abilities. He published the symphony of John K. Paine, which was probably the first appearance in print of the score of a large orchestral work by an American composer.[2.] He was the first to recognize the gifts of Arthur Foote, George Chadwick and Mrs. H. H. A. Beach. "He also appreciated the genius of Edward MacDowell when he returned in 1889 from Europe with his reputation entirely European and could find no New York publisher for his manuscripts."[3.]

The list of important publications of this firm is a long one and includes the following -

Composer	Compositions
Mrs. H. H. A. Beach	Most of her works
George Chadwick	Many works, especially concertos and sonatas.

1.) Estimate of Mr Austin, Editorial Manager of Arthur P. Schmidt.

2.) Foote, Arthur - Tribute in Musical America May 28, 1921

3.) Mrs. MacDowell Laments Passing of Mr. Schmidt, Chicago May 7 - Musical America May 28, 1921

Composer	Compositions
Arthur Foote	All his orchestral works
John K. Paine	All his important works
Edward MacDowell	Many works
Henry Hadley	Whom it introduced
Marion Bauer	
Gena Branscombe	
Mabel Daniels	
Margaret Lang	
Frank Lynes	Piano works
John W. Metcalf	Most works
Grant Schaefer	Piano works

Later American Composers

Bruno Hohn	"Invictus"
Henry Dunham	Organ works
Addison Porter	Many works
Faelton Pianoforte School	All original material
Charles Dennée	Piano works
Rudolf Friml	Piano works
Ernest Henry Adams	Piano and violin works
Florence Newell Barber	Piano and violin works

This house has also published original works of such foreign composers as M. Moszkowski of Poland, pianoforte studies, and the modernists.

Roy Agnew of Australia,	Piano and violin compositions
Ellen Coleman of England	Piano compositions
Trygve Torjussen of Norway,	Piano compositions.

The Boston Music Company and G. Schirmer.

This business started in 1885 with the opening of a small shop at Number Two Beacon Street, by Gustave Schirmer Jr., 1864-1907, son of the founder of ~~the~~ G. Schirmer Company, the New York publishing house. Later the store was moved to 26-28 West Street where it became wellknown as the Boston Music Company. Now at 116 Boylston Street its business is retail and mail order, selling to the Orient, South America and Australia, and publishing.

Since the New York house published "Schirmer's Library of Musical Classics," containing many of the most popular numbers in Peter's edition for which it had been exclusive agent, and a "Collection of Operas and Operettas in Vocal Score" of standard works new and old, the Boston Music Company has featured music of the better type of modern composers.

In addition it took over the Hatch Music Company catalog of easy piano compositions in 1919, and the catalog of C. W. Thompson in 1925. It is the American Agency for publications of Winthrop Rogers, Ltd., the eastern representative of the Willis Music Company of Cincinnati, noted for its educational school music, and has had the exclusive agency of Carrie Jacobs-Bond's compositions since 1922.

At the present time its own catalog comprises vocal, semi-popular, octavo choruses, pianoforte, organ and orchestral music, and contains more copyright numbers than many. Through its connections it carries operettas, cantatas and orchestral music, particularly for schools.

This company's major publications are the "Boston Music Company's Popular Concert Library," "Boston Music Company Edition," and the"John M. Williams' Piano Books and Educational Series Music."

The first is a collection of compositions which are orchestrated for small, full and grand orchestra. The composers are mainly the more modern ones and include such wellknown names as Albeniz, Cadman, Debussy, De Koven, Friml, MacDowell, Nevin, Palmgren, Stoessel and Toselli.

The "Boston Music Company Edition"of nearly four hundred copyrighted numbers consists of compositions for pianoforte, violin, violin albums, violin and pianoforte, violoncello and pianoforte, brass instruments, mandolin and pianoforte, organ, church and recital music, chamber music trio albums, and song albums, especially of American, Finnish, French, Italian and Russian composers. Its list of pianoforte works contains such names as Heller, Marschal-Loepke and Schytte, and repertory albums for pianoforte by American, Finnish, French, German, Italian and Russian composers.

The "John M. Williams' Piano Books" is a graded course of study which they have had for five years. In that time over one million copies of these books have been sold and conservatories, schools and colleges all over the United States are using them.

Mr. Schirmer was the first to recognize Ethelbert Nevin's talent, "The Rosary" being one of this company's copright numbers. New works by modern composers especially Daniel Protheroe, Leo Sowerby, and Rudolf Friml, whose "Arabian Suite" is one of the company's publications, are constantly being brought out. Matilde Bilbro of the South is a new composer introduced by this company.

Carl Fischer Inc.

This New York company, founded in 1872 opened its Boston branch in 1908. This is a retail store located at 252 Tremont St., and is the Boston representative of the Buescher Band Instrument Company of Elkhart, Indiana.

This firm isbest known for its orchestral and band publications as it has the largest violin, orchestra and band catalogs in the United States. What is not so well known is that it has good pianoforte and vocal catalogs. In 1930 its "Manual of School Music" of four sections - I. Orchestra Music, II. Band Music, III. Choral Music, IV. General, Miscellaneous, Instruments and Music Literature - appeared in response to the growth of school music throughout the country.

A great contribution of this house has been its seven-volume publication of "The Master School of Modern Pianoforte Players and Virtuosi" by Alberto Jonas in collaboration with many of the best experts as editors. It took eight years to prepare the first volume of this work of pianoforte study which came out in 1922. The last appeared in 1929.

This company publishes all the works of Fritz Kreisler and Mischa Elman, and original songs by Rachmaninoff, Leo Ornstein and Clarence White, the colored composer and violinist. It was also the first company under Olin Downes' leadership to publish Russian songs with both Russian and English texts by such composers as Arensky and Rimsky-Korsakoff.

This concern, although a New York house, is included in this paper because it has been publishing more works of New England composers since the establishment of its Boston Branch. [1.]

New England composers who have been introduced or many of whose works have been published, include

Julius Chaloff	Songs and pianoforte pieces
Bainbridge Crist	Majority of his songs
Richard Czervonky formerly of the Boston Symphony Orchestra	Songs and violin selections
Maude Cuney Hare	Creole songs in creole patois
Henry Hadley	Songs, piano, violin and orchestral works
Werner Josten	Songs
Edmund Severn	Songs and piano pieces

Some of Max Heinrich's own songs and his revision of the pioneer master editions of the songs of Brahms, Schubert and Schumann were also brought out by this company.

2. Educational Music Publishers.

Since the publications of music for school use have kept pace closely with the development of school musci the progress of school music is sketched briefly here.

Vocal music was first started in the grammer grades of Boston Public Schools in 1837 and continued by Lowell Mason until 1841 when he was succeeded by Benjamin F. Baker. Music was not taught in the primary grades of Boston until 1864 when Luther

1.) A statement of the manager, Mr. Bergstaller.

Whiting Mason was appointed to supervise its introduction as he had been successful in introducing it in those grades in Cincinnati in 1857. Under Julius Eichberg's supervision music was first put in Boston high schools in 1869. In 1872 its extension into all the high schools of the city formed a complete public school system.

Originally music was taught as a special subject by a special teacher. Gradually this teacher became a supervisor of the grade teachers who were made responsible for its teaching.

"The development of music in the high school as a serious study has taken place almost wholly within the present century and mostly within the last fifteen years,"[1] especially instrumental music.

"The aims of school music teaching have shifted considerably from epoch to epoch, but always in the direction of values more and more clearly musical. In the introductory period the aim was to have every child learn to sing and the values most thought of were those of recreation following mental fatigue from other studies. In the next generation the aim was to have every child learn to read music as a key to understanding its treasures, a value which was mainly concerned with the child's future. The child-study movement was largely responsible for making clear the present aim of school music - for every child to appreciate and take pleasure in music not in a vague and indefinite future but here and now".[2]

The various graded book series reflect clearly the changing aims and their authors' views on methods, namely whether singing can best be taught by rote or scale and sight reading. The earliest books seem primitive and almost ludicrous in comparison with the modern ones and show what progress has been made. The present day

1) Birge, Edward Bailey - History of Public School Music in the United States, p. 161. 2) Ibid. p. 159.

series are far ahead of European publications for a similar purpose, although Vienna in particular has attractive books for children. Yet it is to be hoped that there will be further progress in the matter of suitability of the songs for children's voices and in the quality of the music and texts of many selections.

Mr. Birge comments on high school music books published during the period of sight reading emphasis as follows--"The High School Music books of the period (1885-1905) edited by such men as Eichberg, Veazie and Tufts were of a high order excellence, containing standard part songs and selections from operas and oratorios, and school music publishers had already begun to issue well edited choruses in pamphlet form for supplementary music for both grammar and high schools".[1)]

Ginn & Company.

This firm was established in 1867 for the publication of educational textbooks of all kinds. It has its own building at 15 Ashburton Place.

The first graded series of school music books issued in the United States was the "National Music Course" compiled by Luther Whiting Mason and published by Ginn & Company in 1870. It was really the sale of these books which floated and secured the business success of this company but three years old at that time.

The need for graded material and a well organized method was so well met by this course that its use in the United States became practically universal. "It was also the prototype of all the many methods which followed it. Moreover its influence was

1) Birge, Edward Bailey - History of Public School Music in the United States, p. 138

international as a translation of this course was published in Leipsic and used in German schools, and the method was adopted by the Japanese Government for use in the schools of that country following a three year's sojourn there by Mr. Mason as a governmental supervisor". [1.]

The course consisted of four pupils' books, a teacher's manual and charts. Mr. Newton, head of the Music Department, thinks that Mr. Mason was assisted by Mr. Julius Eichberg in the compilation of his fourth book. The song material was largely German and harmonic with its prevailing use of thirds and sixths in two-part songs. Mr. Mason used the tonic sol-fa modulator and Galin Paris-Cheve notation, a modification of the tonic sol-fa, using numbers instead of syllables as a temporary step preceding study of the staff. Its basic principle is the revival of the movable "do". The second book which was for intermediate use developed music reading through a study of the scale, first in the key of C, common intervals, simple rythms and two-part singing. Then other keys were studied. In basing the beginning of reading on rote songs Mr. Mason was the first advocate of the song method of teaching.

In 1885 Ginn & Company published the "New National Music Course", a revision by L. W. Mason of the "National Music Course."

In 1896 this firm published, as the result of its Turner Centre, Maine, Summer School, "The Mason Music Course," designed especially for rural schools. According to Osbourne McConathy

1.) Birge, Edward Bailey - History of Public School Music in the United States, p. 99.

this course was distinctive in that it had two textbooks and a manual for teachers which gave instructions and directions and included accompaniments to the songs of the textbooks".[1].

The next series of Ginn & Company, the " New Educational Music Course", by James McLaughlin, George A. Veazie and W. W. Gilchrist was issued from 1903-1906. It consisted of two primers, five readers, introductory and primary sight singing melodies, covering the first nine grades, and two teachers' manuals, one for the elementary and the other for higher grades. Later two more books were added, the "Intermediate Song Reader" for fifth and sixth grades and the "Junior Song and Chorus Book" for junior high schools.

In line with the advance in school music objectives the underlying principles of this book were to develop the child in the four essentials of good musical conceptions, through the songs, voice training, sight singing and musical interpretation. This series has been extensively sold.

The latest series of this company is "The Music Education Series" prepared by Thaddeus P. Giddings, Will Earhart, Ralph L. Baldwin, and Elbridge W. Newton as managing editor, published in 1923.

"This is the first course divorced from 'method', that is, material is furnished consisting entirely of songs sufficiently beautiful and easy to be used by adherents of any method, And to other essentials of music education is added an organized course

1.) Birge, Edward Bailey - History of Public School Music in the United States. p. 133.

in music appreciation with phonographic records made expressly for the purpose. The course in listening grows out of the vocal material of the series and consists largely of instrumental classics. This course has served more than any other." 1.

This series follows the Standard Course of Study adopted by the Music Supervisors' National Conference and is arranged in four-book, five-book and eight-book courses to meet the needs of various sizes of school systems, differing only in the number of songs. The eight-book course is one book to a grade. There are two teachers' manuals, one for the shorter book course and the other for the eight-book course, a home edition of four volumes with accompaniments, "Adventures in Music" for rural schools with a pamphlet teachers' guide, and weekly outlines for teachers. In addition there are five cases, containing fifty-four music appreciation records to be used with a music appreciation textbook.

Ginn & Company is the only music publishing house which has made its own music appreciation records. This was done in 1926 with Henry Hadley, whom Mr. Newton considers the best recording conductor, and members of the New York Philharmonic Orchestra. Great care was taken to make the records clear cut and the usual number of woodwind instruments was doubled to bring out their tone color distinctly.

When the "National Music Course" was published there were few teachers prepared to use a graded series like this to advantage. So the Company started a school called the National Summer School of Music which was organized October first, 1886, in Boston.

1.) Copyright letter of Jan. 1932 of Mr. Elbridge F. Newton of Ginn & Company, p. 8.

Daily sessions were held through the entire first year and diplomas were granted September 2, 1887. The first summer sessions were instituted in 1888 and the first diplomas for summer school work granted in 1891.

The first faculty consisted of

High School Department

George A. Veazie	Chelsea
O. B. Brown	Malden
Samuel H. Hadley	Somerville

Grammar School Department

J. B. Sharland	Boston
J. M. Mason	"
Henry G. Carey	"
W. S. Tilden	Framingham
L. B. Marshall	Arlington

Primary School Department

Luther W. Mason	Boston
George A. Veazie	Chelsea
W. S. Tilden	Framingham

Eastern sessions of the summer school, which was a three-year course, have been held in Boston, Plymouth in 1896, Glens Falls 1898, and Asbury Park, N. J. At the twelfth session held at Asbury Park the subjects taught were music, drawing, physical culture and vertical penmanship. Western sessions were held at

Chicago and Detroit. The eastern sessions were discontinued first.[1] The advance in the subjects taught is shown by the list of courses of the last sessions held at Lake Forest, Illinois, namely child voice, chorus, ear training, elements and notation, harmony, history, interpretation, melodic construction, methods for grades and for high schools, practice teaching, sight singing and orchestra.

Silver, Burdett & Company.

This company was founded in Boston in 1885. Branches were opened soon afterwards in New York, Chicago and San Francisco. In July 1922 the home office was transferred from Boston to Newark, New Jersey as a more central location. The Boston office is retained at 221 Columbus Ave. as a centre for the company's New England business.

The second series of graded song books issued by a publisher was "The Normal Music Course" compiled by John W. Tufts and H. E. Holt. This was originally published by D. Appleton and Company in 1883. The publishing rights for this course were secured in 1885 by Silver, Burdette and Company who started their business with this and the "Ward Rational Method of Reading". Mr. Holt was a pupil of Mr. Mason and assisted him as one of the music supervisors in Boston from 1869-1898. Mr. Tufts edited and composed the music for the various books "in which he was the first to use pictures illustrative of the text and drawn by himself."[2]

"The National Music Course" had demonstrated that all children could sing, so "The Normal Music Course" was designed to

1.) Exact date is not obtainable.
2.) Birge, Edward Bailey, History of Public School Music in the United States p. 114.

serve the double purpose of providing plenty of exercises and songs grades so that the grade teacher could conduct the music lesson, and of covering every problem so thoroughly that the children would be compelled to read music.[1]

The basis of the method was the teaching of the major scale as a melody from which all the intervals were developed. Both tonal and rythmic dictation were emphasized and in dictation much use was made of the modulator, charts and five fingers to represent the staff. Ta te ti note names were used to designate the length of the notes as rhythm was taught by the watching of a swinging pendulum instead of by beating time. The double process involved for the children, of thinking of pitch and ta te ti note names at the same time, was probably the reason why children could not read music easily after mastering the tonal and rhythmic problems.

The series consisted of first, second and introductory third reader for soprano and alto voices, and two third readers, one for changed and the other for unchanged voices, drill charts in nine keys of exercises and songs for elementary grades, a high school book and a teacher's manual. The harmony of the two and three part music was contrapuntal, being the result of different melodies written one below another.

In 1892 the "Cecilian Series of Study and Song" by John W. Tufts was published as supplementary school music. There were four books in the complete series for the eight grades, each divided into exercises and songs, a one-book "Common School Course"

1) Birge, Edward B. - History of Public School Music in the United States p. 114.

and the "Euterpean," "Polyhymnia" and "Avedean" collections for high schools and choral societies.

In 1898 the "Modern Music Course" was published by Scott, Foresman and Company, and the publishing rights for this were acquired by Silver, Burdett & Company in 1901. This graded series was the joint product of Robert Foresman, who planned the books and determined the governing psychology, and Eleanor Smith, who as editor passed on all the material, translated many of the verses and wrote many of the songs.

This series consisted of a primer with rote songs, a first book introductory to two part singing, a second reader of graded unison and two part songs, a third book in two parts, one for changed and the other for unchanged voices, of songs by notable composers with three part singing prominent, and a fourth book for high schools. In addition there were a complete one-book course, five supplementary books of songs, and teachers' manuals. The arrangements were varied and special attention was paid to boy's voices.

This course was another step forward in music education because it pioneered in sponsoring the idea of teaching music reading through singing, not exercises, but songs only and those of the highest quality.

The material included folk songs, typical songs of the important music epochs and selections from the classical masters and good modern writers. The rote songs were of two types, those directly related to the studies and sight reading exercises given

below them in rhythmic and tonal form, and those not directly related but to be studied for those two points.

Because these songs accorded with the new ideas of the child study movement and were joyous and buoyant this series soon became very popular especially in the middle of the country.

In 1910 appeared the "New Normal Series" by Tufts and Holt, a revision of their earlier series.

In the same year were published "The Child's First Studies in Music" and two books of graded songs by Samuel W. Cole, Supervisor of Music in Brookline and teacher at the New England Conservatory. Cole & Lewis' "Harmonia' for part choruses of mixed voices also appeared in 1910.

The "Progressive Series" published in 1914 with Horatio William Parker, Osbourne McConathy, W. Otto Meissner and Edward Bailey Birge as editors was their next important set of graded textbooks.

The basic idea of this series was the song method and in general it followed the principles of the "Modern Music Course." It contained a suggested weekly program for the aid of the grade teachers. It is the first course to use many selections of modern composers, some being composed especially for the series.

It consists of four books for the eight grades, three teachers' manuals with accompaniments and additional rote songs and a primary song book for sight reading. There is also a

Catholic edition with a Gregorian chant supplement and a one-book course for rural schools. It was used quite extensively.

In 1924 Silver, Burdette & Company published their "Symphony Series of Programs for School and Community Orchestras" by Frederick A. Stock., George Dasch and Osbourne McConathy for junior and senior high schools. One noteworthy feature is that this was the first collection in which the second violins always play a melody.

The "Music Appreciation Course" by Mabelle Glenn, Margaret Lowry and Margaret De Forest was published in 1926. It is a complete course from the first grade through junior high school, correlated with vocal lessons and can be used with any series of textbooks. There are two teachers' manuals and three pupils' music note-books for the grades, two pupils' music note-books for junior high school, a manual for these note-books and a supplementary book of "Listening Lessons" by Agnes Moore Fryberger. This course leaves detailed analysis of form for more advanced study.

The latest vocal graded series is "The Music Hour" edited by Osbourne McConathy, W. Otto Miessner, Edward B. Birge and Mabel E. Bray and published in 1927.

The song is the basic method of approach in this series also, The song material was selected from standard sources, folk song literature and original works of contemporary composers. It is graded to correlate with the history and geography studied in the respective grades. Many illustrations are used - great art pictures

for the mood of the song and art correlation, composers' portraits for music history and instruments of the orchestra for orchestral correlation. The many beautiful three-color illustrations are the first appearance of this feature in a textbook series. There is detailed rhythmic work for each grade. Two part songs begin in the fifth grade and three part in the sixth.

The series consists of six pupils' books for six grades, and three teachers' manuals, "Music in Many Lands" for Junior High School, one book and two book coursed for rural schools. There is also a Catholic edition with Gregorian chants mingled with the other songs. More than two hundred and fifty Victor records are also correlated into six units with teachers' guides for their use in the music appreciation work of the "Music Hour" series.

In addition to these main series Silver, Burdett & Company has collections of supplementary school music, notably the "Silver Song Series" for all the grades and high school, and collections of special types of songs. They also have theory and reference books.

This company started the first summer school in 1884 at Mr. Holt's home in Lexington, Massachusetts. This was the pioneer school established exclusively for the training of music supervisors. In 1889 this school for drawing and music was called the American Institute of Normal Methods and in 1891 it was incorporated in Boston with Henry E. Holt, J. W. Tufts, Leonard B. Marshall and Samuel W. Cole as members of the faculty. Fred A. Lyman of Syracuse, New York, was also a teacher during the early years. A diploma was granted for a three-year course consisting of a three weeks session each summer with ten recitation hours a day. Eastern

sessions have been held in Boston, on the Hudson and Staten Island, N. Y., and for some years at Auburndale, Massachusetts. Western sessions have been held at Northwestern University, the last at Lake Forest in 1929.

The forty-first session in 1931 included courses in methods, practice teaching, student orchestra conducting, harmony, music appreciation, orchestration, class instruction in instruments, folk dancing for recreational rythmics and art. In addition there was a music festival and an educational symposium.

Following Mr. Holt's example the publishers of the other leading music courses held summer schools for training teachers of music before the normal schools were equipped to give this. Later teachers' colleges and universities established summer courses for the training of classroom music teachers. The leading music supervisors taught the methods and principle of each textbook series and also gave valuable instruction in the art of song leading, and the treatment of children's voices. Many teachers received real inspiration for their work from participating in the chorus singing under an able director. Naturally the meeting and contacts with other supervisors were one of the most valuable features of the schools.

"Though these schools were each devoted to teaching the pedagogy of a particular method, their general atmosphere was by no means commercial. Their educational level was high and one may wonder how thousands of music teachers would have received adequate training without them".[1.]

1.) Birge, Edward Bailey - History of Public School Music in the United States. p. 129.

D. C. Heath & Company.

Mr. D. C. Heath, who had opened the New York office of Ginn & Company and later was a partner of Ginn & Heath, established his own business of D. C. Heath in 1885, the year the partnership was dissolved. The Boston Office is now located at 285 Columbus Ave.

In 1889 this company published a graded school series known as "The Public School Music Course" by Charles E. Whiting. This was based on the scale method as it was intended for sight reading. It used ta ta te te for time names of notes, and numbers and letters with sharps and flats beside them were printed below the different scales.

The songs were illustrated and they and the exercises were graded. Two part songs were put in the first book. The series consisted of six books, a supplementary third book with accompaniments, an additional girls' edition of the sixth book, an "Institute Reader" for books 1-6 and a "Young People's Song Book" for part singing.

A revised edition by Charles E. Whiting was issued in 1908 called the "New Public School Music Course" which is still sold somewhat. In this the folk song, with its motif and theme, is stated to be the keynote. The technical material is grouped as exercises. There are five readers, the fifth having two editions, one for girls only, the other for mixed voices, and teachers' manuals. The "Young People's Song Book" with from one to four part exercises and songs is an elementary course for ungraded schools, There is also a "High School Choralist" by the same author.

This company has made it a policy not to publish graded series of music books and is confining its music publications to occasional volumes which they believe have special merit, as for example "A Gateway to Music" by Wilton W. Blanke and Jay Speck. This has been adopted in Philadelphia as a basal textbook in elementary music theory.

American Book Company.

This company, established as a New York firm in 1890, opened a Boston Office at the same time. Its music department was started almost with the beginning of the company.

In 1895 its first series of school music books, the "Natural Music Course," was published. Its editors were Frederic Ripley, headmaster of the Prince School of Boston, and Thomas Tapper, the wellknown authority, on music pedagogy. Its basic principle was the scale drill sight reading method for which it contained many exercises. It was prepared at the request in 1877 of Julius Eichberg, then Director of Public School Music Instruction in Boston, to consider the presentation of music from the standpoint of the grade teacher.[1.]

It omitted much earlier technic such as hand signs, ladders and intervals as a study, with the aim of having the notes mean something definite to the pupils. The rhythm was joined to melody and the rhythm building scheme common in France was hit upon. This means adopting a certain note as a standard and tieing it with

1.) Birge, Edward Bailey - History of Public School Music in the United States p. 117.

other notes to produce all the higher note values used.[1.] This course made an important contribution to music education and was long and widely used in many parts of the United States.[2.]

In 1908 the "Eleanor Smith Course" was published. The idea of this course was to teach music reading and the principles were similar to those of her earlier course, the "Modern Music Series".

The "Hollis Dann Series", brought out in 1915, proved to be one of the most widely used school series ever published, and it is still quite popular. "It was practically made by two men whom Mr. Dann employed, Harvey Worthington Loomis, and Arthur Edward Johnstone. It was a kind of cross between a so-called song series and a solfeggi series."[3.] It contained many tuneful exercises and what might be called manufactured songs to illustrate technical points for the mechanics of study beside songs of fine quality. This series was for the grades with a separate book of "Junior Songs for Junior High school".

In line with the new idea of training children's emotions the"Foresman Books of Song" by Robert Foresman were published in 1923. Their basic theory is music reading and the selections have all been made with a view to their help in training the emotions. So far five books for grades and a higher book of songs for high

1.) Birge, Edward Bailey - History of Public School Music in the United States p. 120.

2.) Ibid. p. 121.

3.) Newton, Elbridge W. - Copyright letter of Ginn and Company, January, 1932.

school have been published. A sixth book is coming out for the ninth grade,

From the standpoint of music quality this is one of the best series, as all the selections are either folk songs or by classical composers, except for a few by contemporary composers.

This company early established a summer music school starting it in 1895 at Cataumet, Cape Cod, Mr. Ripley's summer home, as Osbourne McConathy recalls. In 1896 it was held at Hingham, Massachusetts, where the Director, Mr. Clarence Birchard, had gathered a most exceptional faculty, including among others William L. Tomlins, Julia Ettie Crane, Francis E. Howard and Hollis Dann. In 1897 the session was held in Symphony Chambers, Boston. This three-year certificate course was discontinued some time in the early 1900's.

C. C. Birchard & Company.

This company was founded by Mr. Clarence C. Birchard in 1901 with the publication of "The Laurel Song Book," edited by William L. Tomlins. Frederick Manley through his literary and editorial contributions was also an important factor in its creation. It is now located at 221 Columbus Ave.

The aims of this song book were to furnish school music with texts of definite literary value and subjects to interest and inspire American youth, emphasizing joy, hope, brotherhood and courage as the dominant emotions of American life. This volume was the pioneer in the use of the art song of great

composers which has become as important in music education as the folk song.

This book brought out for the first time in a school song book works of many American composers. Texts were selected from the great poets and writers of the English-speaking world and the range of the voice parts was considered.

The same principles were followed in "The Laurel Music Reader" - next book in the "Laurel Music Books" catalog - also edited by William L. Tomlins and published in 1906, and in later books, all of a supplementary nature rather than a graded series.

"The School Song Book" edited by Osbourne McConathy, first published in 1910, revised and enlarged in 1930, was adopted in over five thousand cities and towns.

Under the editorship of M. Teresa Armitage the "Laurel Series" was expanded by the addition of

"Junior Laurel Songs". for upper grades, containing good texts and beautiful music of moderate difficulty in diversified arrangements;

"The Laurel Unison Books" for unison singing of great operatic and classic masterpieces;

"Folk and Art Songs" fresh folk songs and material from great masters for intermediate grades correlating with other subjects;

"Senior Laurel Songs" for high school with compositions from every representative period of music history to and including the present;

"The Laurel S. A. B. Book" for junior high school.

In the series of "Laurel Music Books" American composers were represented for the first time in vocal school music, especially Harvey Worthington Loomis and Arthur Farwell, and also Arthur Edward Johnstone, Edgar Stillman Kelley, Horatio Parker, Clayton Johns, George W. Chadwick, Arthur Foote and Henry Holden Huss.

The "Twice 55 Series" started in 1913 with the publication of "Eighteen Songs and Choruses for Community Singing", prepared at the request of the Music Supervisors' National Conference and edited by Peter W. Dykema, Hollis Dann, Will Earhart and Osbourne McConathy. It was the pioneer book to contain the cherished songs of the country. It has been expanded till it now includes six different books for various bocal groups. Altogether over one million copies of this series have been sold.

Books were published for glee clubs and choral groups, such as "Laurel Songs for Treble Voice", "The Laurel Glee Book" for male voices, "The Check Book" of part songs for high school boys edited by Peter W. Dykema, and "Concert Songs for Girls" by M. Teresa Armitage for girls of high school age.

Octavo music for part singing was started early. The "Laurel Octavo Choruses" catalog of seven hundred pieces includes works of both foreign and American composers, among the latter Joseph W. Clokey and Samuel Richards Gaines particularly. This led to the publication about twelve years ago of choral works and to what has now become two catalogs - "Operettas, Cantatas and

Operas" - one for treble and the other for mixed voices, both for amateur use. The music of these is by American composers generally known for other types of music.

The publishing of orchestral works with the new feature of complete conductors' scores for school use was begun about 1920. Previous to this the conductors of school orchestras had had to rely on the piano part or violin cued parts for a score. This "Better Music for the School" catalog includes training courses, separate pieces, compositions for various solo instruments and the latest addition, exercises to build up a young orchestra.

"The Toy Symphony Orchestra" catalog was started about five years ago, first under the name "Kinder Symphony". These publications have been brought out because the rhythmic band has developed from a playtime kindergarten activity into an educational project.

The "Laurel Library Books" catalog consists of textbooks on music and the teaching of music in the public schools.

"American Composers, Music for Orchestra" is the latest development by this company. It is the publication during the last two years of large orchestral works, all new and original, with the definite aim of helping modern American composers. The first of these works published were "Aladdin Suite" by Edgar Stillman Kelley, "The Ocean" by Henry Hadley, "Overture to a Drama" by Arthur Shepherd. The other composers whose works are included are

Ernest Bloch

George Whitefield Chadwick

Frederick S. Converse - "California," "Flivver Ten Million" and "Scarecrow Sketches" -

Boston University
School of Education
Library

Herbert Elwell

Louis Gruenberg

Howard Hanson - Nordic Symphony and two other works -

Philip James

Werner Josten

Daniel Gregory Mason

Douglas Moore

Bernard Rogers

Leo Sowerby

William Grant Still

Albert Stoessel

Randall Thompson

Bernard Wagenaar

Emerson Whithorne

T. Carl Whitmer

Edgar Varese.

There is included also one symphonic suite by a foreign composer, G. Francesco Malipiero.

3. Special Music Publishers.

A. Vocal and Pianoforte.

The B. F. Wood Music Company.

This company was founded by Benjamin Frank Wood of Lewiston, Maine, a graduate of the New England Conservatory of Music, a teacher of pianoforte and organ, and organist and choir director in Maine. The company was incorporated in Maine in November 1893, but since 1917 has been a Massachusetts corporation. John A. Preston and Chester W. Greene were also prominent during the early years of the company in the development of editorial policies.

This "company was among the first to establish its business upon the policy of 'Protection of the Retail Dealer'—a policy to which may be attributed much of its phenomenal success,—and in this respect its lead was followed by many other publishing houses." 1.

Because of the growth of business branch offices were opened in New York, London, and Leipzig, Germany. The London branch was under the management of D'Auvergne Barnard, the wellknown English composer, from its opening in September 1905, until his recent death. Edward Barnard from the New York office of Bosworth and Company has succeeded him. In October 1920 the company moved into its own building at 88 St. Stephen Street and discontinued the New York office which was then no longer needed.

Since Mr. Wood's death in July 1922, Mr. Harold W. Robinson has been president of the company.

1.) Music Trade News, September 1930 p. 11.

From its start the company has devoted itself to the publication of easy educational music for the pianoforte, voice, violin and mandolin.

It also handled for some years the Bosworth and Cranz editions of the classics. Its own "Edition Wood" which was started soon after the company's founding has become the second largest edition in the United States and one of the largest in the world.

"Edition Wood" consists of studies, recreations and classical works. Such composers' names appear as Bach, Otto Barth, Beethoven, Bertini, Chopin, Clementi, Czerny, Jules Devaux, Mozart, Louis Plaidy, Sartorio, Schubert, Schumann, Tschaikowsky, and for violin F. Mazas, I. Pleyel and O. T. Sevick.

"Wood's Octavo Series" of two and three part women's, male and mixed voices, begun in September 1931, already consists of some sixty numbers.

Early in 1932 was inaugurated a new feature the publication of band music with the issuance of the "Criterion Band Book" containing fourteen compositions. Its specialities are a full conductor's score, melody books for all instruments, parts or provision for less common band instruments and parts for a string choir.

Margaret Anderton's copyright arrangement of excerpts from famous classical works as used in her classes was also issued in 1932.

"Important composers whose works have been introduced to the

public through this Company are: Otto Barth, Arthur L. Brown, H. L. Cramm, Caroline H. Crawford, Jules Devaux, Paul Ducelle, Rudolf Eckhardt, Robert B. Eilenberg, Lae Aileen Erb, C. W. Krogmann, Edwin Vaile McIntyre, L. E. Orth, L. J. Quigley, Arnoldo Sartorio, A. Tellier, Max Werner and many others."[1].

Charles W. Homeyer & Co.

Mr. Homeyer, who had been selling for other Boston retail music stores, started his own business about 1900. This is now at 458 Boylston Street.

While this firm is known mostly for music and instrument jobbing and retailing, it has done some publishing, practically from its inception, of piano pieces, vocal songs and choruses, mostly of the art type, and some teaching material. Most of the publications are of foreign works for which this firm has the American rights, though some are by Americans.

The piano music includes works of modern French, Spanish and Russian composers for which this company has the American rights, arranged and edited by George Copeland and a pianoforte solo edition of eleven standard symphonies edited by John P. Marshall. These last have been used for study and analysis by a number of colleges and universities.

The songs include compositions by Carrie Bullard, Samuel Endicott and John Adams Loud, and the choruses are for all combinations of voices including some school music for three parts.

1.) Music Trade News, September 1930 p. 11.

E. C. Schirmer Music Company

This company was established by Mr. E.C. Schirmer in 1921 with the publication of the "Concord Series", a graded series of school textbooks by Thomas Whitney Surette and Archibald T. Davison. The name for the series came from Mr. Surette's summer school held in Concord in 1915.

Its aim has always been the publication of only the finest quality music as its catalog shows.

Although it has specialized in choral music for the educational field it was not included in the group of Educational Publishers because it has expanded the scope of its publications to include much vocal music not intended primarily for school use, some music for pianoforte and also for instruments.

"The Concord Series" consists of music and books on the teaching of music. The graded series was based on the song method as is shown by the fact that the first two books for grades one to six contain only songs. Some exercises of solfeggi method were added later in pupils' books.

The series covers nine grades and comprises a book of folk songs for the first three grades, unison and part songs for grades four to six, the "Concord Junior Song and Chorus Book" for grades seven to nine, and three corresponding teachers' books with accompaniments and a manual. "The Concord Teacher's Guide", and Junior and Senior Books for treble voices are in preparation.

Other books in the Concord Series are

"The Home and Community Song Book" by Mr. Surette and Mr. Davison.

"Harvard University Glee Club Collection" of Part Songs for Men's Voices by Dr. Davison, four volumes of songs, tried out by them. These consist mainly of the best choral works of the Italian, English madrigal and Spanish schools of the sixteenth century.

"Radcliffe Choral Music" edited by G. Wallace Woodworth,

"Vassar Choral Music for Women's Voices" edited by Dr. D. E. Harold Geer.

"The Concord Piano Books" - a series progressing from the early forms of music to the classics.

"Concord Anthem and Hymnal" books,

Operetta plays

The "Commonwealth Series" also started in 1921 is a general series for voice and pianoforte.

In 1928 the "A Cappella" series of unaccompanied music for all voices was started. A large part of the music is from the sixteenth century. It is edited by Henry Clough Leighter.

The "St. Dunstan Edition of Sacred Music" edited by the Rev. Walter Williams, Director of St. Dunstan's College of Sacred Music, began in 1931. It consists of vocal music for Episcopal and Catholic choirs all of which has been tried out in the college. Father Williams has collected old and rare music mostly unpublished previously and also includes much by the modern Spanish and Belgian schools.

This house is now bringing out a new edition of chorus parts only of Bach cantatas in both German and English texts, with the idea of saving considerable expense for choruses through the omission of the solo parts. These cantatas have been printed in the form used by the Bach Cantata Club of Cambridge or by the Bethlehem, Pennsylvania, Club. Chorus parts for cantatas of Handel, Mozart, Schubert, Beethoven, ~~and~~ Brahms and a few modern works are in preparation.

Their instrumental music is for violin, violoncello and string quartets. The violin quartets are unique in being an intermediary step between easy material and that for regular quartets.

New American composers introduced by this company are

Aaron Copeland - choruses,

Robert Delaney - a Guggenheim fellowship holder, choral music,

Randall Thompson - a Prix de Rome and Gugenheim fellowship holder, vocal music.

Other Americans whose works they have published are

Heinrich Gebhardt - piano and instrumental compositions,

George Newell of Texas and Mexico - piano selections.

This company is also sole American agent for

Compositions of Paul Juon,

Honegger - "King David",

"The Cowley Carol Books" of the English Cowley Fathers,

"Chester Polyphonic Library" - English Catholic Music, specially the ancient edition for liturgical correctness.

Riker, Brown and Wellington.

It seems as though each new generation of modern American composers finds difficulty in getting its compositions published. So Mr. Riker, himself a New England Conservatory graduate and a composer, with Mr. Brown and Mr. Wellington established this business in 1929, with the aim of specializing in the publications of large or small works of American composers which have merit.

To date their publications have consisted of songs, small pianoforte compositions and octavo men's, women's and mixed voices, sacred or secular.

They are also making a specialty of finding and publishing manuscripts of old masters. Illustrations of this are a group of five songs of Handel arranged for John McCormack by Samuel Endicott and four old Spanish piano selections from the repertoire of George Copeland and edited by him.

It is interesting to note that their sales which are based on the merit of the compositions have grown steadily during these years of depression.

They have introduced Samuel Endicott as a composer in the United States, Canada and abroad, and are now bringing out songs and octavo works of Paul Allen of Brookline, Massachusetts, whose opera "Last of the Mohicans" published by Ricordi has been performed abroad many times.

b. Instrumental

Walter Jacobs Inc.

This firm,[1] organized by Mr. Jacobs in 1894 and incorporated in 1895, started as a banjo, mandolin and guitar music house.

It has specialized in band and orchestra works. Their catalog was for general use until 1929 when they began publishing for schools also. The latter is partly classical music with some popular but not much modern material.

They also published more or less motion picture type of band and orchestra music for twenty-five years and were especially active in this field having a special catalog for theatre organs from 1920-1929. Then the invention of the vitaphone caused the discontinuance of orchestras and organ playing in motion picture houses.

Their catalog includes a large number of marches like "Our Director", "National Emblem" and the rediscovered "Father of His Country" by E. E. Bagley, "Jacobs' Evergreen Collection of Fifty Famous Old Songs" - Stephen Foster's, Scotch, and religious songs - is one of their best known collections.

Recently they have begun publishing the "Walter Jacobs Choruses and Octavo Miscellany" to be used with bands and orchestras, since they are commencing to specialize in music in which these activities can be combined. The "Delta Series" is another series for band, chorus and orchestra ensemble in combination.

For Jacobs' Band and Orchestra Monthlies see section on music journals.

1) It is located at 120 Boylston Street.

Cundy-Bettoney Company

The Bettoney Company started in 1904 the publication of educational works of music for all wind instruments, especially clarinet and flute for which they have extensive catalogs, some for cornet, trombone and orchestra, and methods for clarinet, flute, saxophone, cornet and trombone. In 1907 Mr. Bettoney bought the Cundy Company which had been publishing since 1860. The music department is now located in Jamaica Plain.

The publications consist of music popular at home and in school, about seventy-five per cent being reprints of classical European works.

C. Church Music.

The Parish Choir.

This publishing business was started by Reverend Charles L. Hutchins in 1873 or 1874 in Buffalo, N. Y., and devoted solely to Episcopal church music.

The first publication was a musical edition of a church hymnal. This was followed by a Sunday School hymnal.

In 1874 Rev. Mr. Hutchins started in his church what was probably the first vested boy choir at a period when that was considered next cousin to papacy. He began with a quartet, then a double quartet and finally had a full choir. To supply the need for music he brought over some by local English organists and reprinted it in 1874 under the name the Parish Choir. At first the

publications were only occasional, not more than fifteen or twenty numbers a year. Gradually within a year or two they became more regular until fifty numbers a year were published.

When Rev. Mr. Hutchins moved to Medford, Massachusetts, in 1877 he established his own publishing business and had a boy choir at Grace Church, Medford. Through his weekly publications which were confined to organists and clergymen he brought out a total of eighteen hundred vocal octavos of carols, anthems, hymn tune, Te Deums and communion services until his death in 1919 when regular publication ceased. Occasional numbers have been brought out to the present time and the office is at 355 Boylston Street.

Since Novello, the only other publisher of music for boy choirs, charged twenty-five sents for this kind of octavo music, these copies, sold for five cents apiece, met a real need as the boy choir movement grew. Thus The Parish Choir was the entering wedge of music to be used by the average boy choir and became a nation-wide mail order business.

Aside from fifty to sixty Americans, the numbers were by English organists and other English composers of sacred music, notably A. H. Brown, C. Simper, J. Stainer and A. Sullivan.

The Parish Choir has also published some of the most widely used musical settings of Episcopal Church hymnals, one in the year 1880, another in 1892, extensively used, and one in 1916.

McLaughlin and Reilly

This firm was established in 1904 and incorporated in 1909 with the aim of publishing Catholic church music. Its business has been expanded to include anthems, sacred songs and communion services for both Catholic and Protestant use while continuing Catholic ritualistic music, hymn-books, masses and motets.

In 1927 this firm bought the business of William E. Ashmall, started in New York City in 1887 and continued in Arlington, N. J. until his death there in 1927. He had published the "Organist Journal" monthly for twenty-five consecutive years beginning in 1889. This contained pieces selected from the works of both classical and modern masters arranged for the organ. McLaughlin and Reilly have not continued this journal but have his organ and anthem music.

For their publication, "The Caecilia", see page 71 in the section on music journals.

Tracy Music Library Inc.

This unique service deserves a few words because there is nothing like it in the whole country. It was established in 1900 by Mr. Metcalf and incorporated in 1925.

They carry standard music, operas, oratorios, cantatas, excerpts and orchestral accompaniments for rent, and make arrangements as ordered for individuals, publishers, schools and musical organizations. They have sent music on this basis to all parts of the United States and to Canada, Alaska, Honolulu, Cuba, Porto Rico,

Isle of Pines and the Philippines.

Their specialty is Gilbert and Sullivan and other light operas. They have unique editions of the former, and property, costume parts and stage directors' guides for amateurs, including diagrams, chorus positions, etc. They can furnish a complete musical outfit for these operas.

For graduation exercises they also furnish whole school departments with octavo and vocal scores and orchestral parts.

D. Music Journals.

Boston has also had a number of music journals, trade journals and house organs of publishers and instrument makers. Those mentioned below include all the writer could discover, but the list is doubtless quite incomplete.

Music Journals

Dates	Name	Comments
April 1, 1820-22	Euterpeiad or Musical Intelligencer	A four-page weekly "Devoted to the diffusion of musical information and belles lettres". Edited by John P. Parker of Milk Street and published by Thomas Badger, Jr. Contained music history, biography, criticism, editorials, and some separate music numbers.
1835-1836	The Musical Library	Co-editors Lowell Mason and George James Webb, the founders of the earliest school for music, the Boston Academy of Music, 1833-47, which laid the foundations for the development of public school music.

Dates	Name	Comments
1837-1840	The Music Cabinet	Co-editors George James Webb and W. Haywood. This reproduced music and contained articles on and news of music.
1838-1839	Boston Musical Gazette	Semi-monthly journal devoted to the Science of Music.
April 10, 1852- September 3, 1881	Dwight's Journal of Music	Edited and published by John S. Dwight and owned by him for six years when it was sold to the Oliver Ditson Company and published by them with him as editor till December 12, 1878. Its publication was then continued by other publishers. "This had a longer career than any journal of its kind in the country. It was recognized here and abroad as generally true to the highest standards in art and had the credit of having contributed to the musical culture, taste and character of Boston."[1].
September 1, 1853 - February 15, 1857	Boston Musical Journal	A semi-monthly issued first at A. N. Johnson's music store, 90 Tremont Street, with B. F. Baker and A. N. Johnson editors.

1.) Dwight, John Sullivan - Memorial History of Boston, Editor, Justin Winsor, 1881, vol. 4 - p.436.

Dates	Name	Comments
	Boston Musical Journal Price one dollar a year	May 1, 1856, B. F. Baker was both propietor and editor, and it was printed by Stacy and Richardson, 11 Milk Street, with the words "and Literary Gazette" added to the name. This contained news, correspondence, editorials, advertising of music, and some pages of music. 1855 vol. 1, numbers 1-4 edited by Eben Tourjée.
February 25, 1860 – August 1871	Boston Musical Times	The first and second volumes were issued fortnightly, then it became a monthly review of music, art and literature, published first by Russell and Tolman, and printed by Edward L. Balch. It contained articles, correspondence, some music and advertising. During 1869 the subheading was "Boston and New York". In 1871 it was published by G. W. Stratton.
October 1869-1895 Vols. 1-41	The Folio	Published by White, Smith and Perry. This was "a monthly journal devoted to music, art and literature. Each number contains two pieces of music vocal and instrumental. Edited by Dexter Smith.

Dates	Name	Comments
Oct. 1869-1895, Vols. 1-41	The Folio	Terms $1.00 per annum."[1] This magazine contained music and technical discussion and some music advertising. It circulated among music lovers and teachers.
1872, copyrighted. 1877,-1878 vols. 1-14	Dexter Smith's Musical,Literary, Dramatic, and Art Paper	A monthly magazine devoted to music, drama, art and literature. It contained some vocal and piano music in addition to articles, news and advertising, and was edited, published and owned by Dexter Smith. Price $1.75 per annum
1878 - 1898	Monthly Musical Record	Established by Oliver Ditson Company in place of Dwight's Music Journal.
1898	Musical Record Successor to previous	A high class magazine edited by Philip Hale and published by Oliver Ditson Company. This was combined in January 1901 with the "Music Review", a pocket-size monthly magazine, started by Oliver Ditson Company in October 1898 to bulletin publications of the house and was entitled "Musical Record and Review."
January 1901	Musical Record and Review	This was edited by Thomas Tapper for two years. Then "The Musician" was purchased from the Hatch Music Company of Philadelphia and combined with "Musical Record" and the "Review" was dropped.

1) Boston Directory, 1870 Advertisement p. 949.

Dates	Name	Comments
November 1903	Musical Record combined with The Musician	This was edited by Mr. Tapper till August 1907 when he was succeeded by Mr. W. J. Baltzell. In 1919 the Henderson Publications of New York took over this monthly.
January 1880- Vol. 13-1891 Vol. 14 - Chicago to Nov. 1893	The Musical Herald entitled The Musical Herald of the United States.	A monthly magazine which "appeals to the public purely on its merits as an educational journal". The first editors were William Apthorp, Louis C. Elson, Luther L. Holden, Francis H. Jenks, S. Brenton Whitney, and managing editor Eben Tourjée. This was published by the Musical Herald Company, Music Hall. It contained articles on music, correspondence, criticism of new publications, reviews of concerts, etc., advertising and some vocal and piano music. Price $1.50 per annum.
1887 - ?	Trifet's Monthly Galaxy of Music	"A magazine of vocal and instrumental music for the masses" published by F. Trifet, 408 Washington Street, Boston. It cost one dollar a year, and was sold by newsdealers in the United States and Canada. The familiar music of Miss Lindsey for Longfellow's "The Bridge" appeared in the May issue which was number five.

Dates	Name	Comments
	Trifet's Monthly Galaxy of Music	Judging by press comments in the magazine it had a wide distribution.
March 1901-1906	Musical World	Philip Hale, Editor-in-Chief, Henry T. Finck, Louis C. Elson and others were the editors. This was published by Arthur P. Schmidt.
	Trade Journals	
1894	Cadenza	Published by the firm of Partee in the interest of mandolin, guitar and banjo playing. It was taken over in 1908 by Walter Jacobs Inc. and combined in 1911 with
1911	Jacobs Orchestra Monthly	The band and orchestra monthlies have the same text but a different music supplement. Under the leader-
1916	Jacobs Band Monthly	ship of Mr. Buttle, editor till 1930, these magazines were the first to support unreservedly the school band and orchestra movement. He was a local and national aid to this movement and one of the prime movers in organizing the New England Festi- val Association. Since 1930 Mr. Morse has been editor.

Date	Name	Comments
July 1917 - 1930	Melody	Published by Walter Jacobs Inc., for motion picture organists. It contained some adapted material but most was original.
About 1905- -1930	Crescendo	A publication for teachers of stringed instruments. Edited and published by H. F. Odell Company until 1925 when it was taken over and carried on by The Vega Company until 1930.
1874 - 1924 Revived in 1930 by McLaughlin and Reilly.	The Caecilia	Published by John Singenberger of St. Francis, Wisconsin, a suburb of Milwaukee. This is a monthly review of "Catholic Church and School Music". Until the war it was published in German as well as English. It discusses music fundamentals, the liturgy, chants, transcriptions of Gregorian music, contains articles by priests, items of interest to choirmasters and twelve to sixteen pages of music.
	House Organs	
1898	Music Review	For this magazine of the Oliver Ditson Company, see page - .

Dates	Name	Comments
	House Organs	
About 1914 - 1922	Scherzo	This was a medium for dealers, featuring new publications of the White-Smith Music Publishing Company.
1928 on	The Birchard Broadsheet	This publication of C. C. Birchard & Company is for music supervisors.

PART II - ENGRAVING AND PRINTING

A. Methods

1. Early Engraving and Printing

The notes of the first music printed in the United States were cut on wood as we have seen,[1.] and the printing was done directly from the wood on the paper.

Music engraving in Europe dates as far back as 1700 and the music plates of that period were made of copper. So the plates engraved by Paul Revere for Josiah Flagg's book, "Collections of Best Psalm Tunes", in 1764 were made of copper.

When music types of engraving tools were not available the printing was sometimes done by the use of special ink and paper and a process similar to the modern hectograph or mimeograph.

The proofs from the copper plates, the pewter plates used later and from the modern block tin, a soft composition of lead, tin and some zinc backed with iron, were pulled with either green or black ink. The latter requires more time and is more expensive as the engraving must be filled in with softened beeswax which holds the ink for printing. The proofs were ~~proofs were~~ printed on a copper plate press. This method of printing directly on the sheets from the plates was generally used until the invention of the lithographic process by Aloysius Senefelder in 1796, and for small editions until not long ago.

In 1753 Christopher Sower of Germantown, Pennsylvania, printed what was probably the first book in the United States to be printed by the typographic method from music type. In 1770 Edes and Gill

1.) See p.3

of Boston printed "The New England Psalm Singer" by this method.

The early sacred sheet music may have been printed from either engraved plates or music type, for William M'Alpine on page 406 of the "Boston Chronicle" of October 17, 1768, advertises as follows -

"William M'Alpine

Informs his customers and others that, being obliged to raise a sum of money in a few months-- He intends to dispose of his stock under the common wholesale price if applied for soon. Most of the BOOKS are of his printing and binding, and will be warranted good.

Among which are

Watts Psalms and Hymns, bound as one volume or separately, with or without tunes; New England Psalms, with or without tunes;"

Music publications both engraved or typographical were rare in America until the beginning of the nineteenth century.

2. Modern Engraving and Printing

The hardened steel die stamps used in modern engraving are generally imported from Germany and are much better cut than formerly. Engraving is done by hand with T squares and dividers to space the alignment of bar lines, notes and rests according to their values. The steel stamps are used with

special hammers for punching the clefs, accidentals, rests, notes, text letters and other music notations on the composition plates. Chippers and scrapers made of softer steel are used to finish the engraved plates.

The usual present day method of engraving is the lithographic process. In this a transfer sheet of Chinese handmade rice paper from the engraved plate and coated with flour and glycerine is pressed on the soft lithographic stone which is a special stone imported from Germany. This impression is rolled with ink, rosin and nitric acid to hold it, and the printing is done from the stone. By rubbing off the engraving impressions with sand and water these stones are used over and over again until they are worn too thin.

Some firms are now using the still newer photo-lithography. This is especially useful for small editions where no plates are made. The composer's music manuscript copy is photographed and these plates are printed through exposure to light on the light-sensitized coating previously spread on the thin zinc press plates. This impression is inked, making that impervious to water and the rest of the coating is washed off the plate. The zinc press plate is put on a press roller and inked freshly for each sheet printed.

Engraved music is now largely used for making line plates for textbooks by photographing a black and white proof from the engraved plate. An electro is then made from the photo line plate for printing from type presses.

Engraved plates, lithographic stones, zinc press plates and electrotypes can be kept as long as desired for later editions.

3. Modern Typography

A font of music type consists of about four hundred different characters. So it takes a skilled worker to combine the type representing clefs, lines, note heads and stems, etc. to form a correct representation.

The compositor first estimates the amount of music which will go into one line and the number of lines to a page. He then sets five lines for the staff, places the various characters for the music notation, and adds the words like ordinary reading matter except that they are spaced for each syllable to come beneath the note to which it is to be sung.

When all the type is set and the spaces filled in with "quads" it is "locked up" in an iron frame or "chase" for a page of music. A rough print or proof is pulled and any necessary corrections are made.

The first improvement from printing directly from type was stereotyping, invented about 1725, not generally used until 1810, and first introduced into America about 1813.[1.] This gave a great impetus to music book printing because it saved the expense of resetting a book for a later edition and it was no longer necessary to keep the type standing.

Electrotyping, introduced about 1840, has now superseded stereotyping. Through electrolysis a wax mould of the type is coated with copper. When this "shell" is sufficiently thick it is removed, backed up with metal for thickness and strength, beaten to correct any unevenness on the face and shaved to standard thickness.

1.) F. H. Gilson Company, Music Book Printing, p.6.

The typographic method permits the use of many different sizes of characters and allows larger editions than can be made from lithographic stones or zinc press plates. The electrotype plates are more expensive to make than these two processes, but the press work is less expensive, so this process has been largely used for hymnals and school textbooks. The printing is done from type presses.

B. Present Engravers

M. O. Henning and Son.

The founder, Mr. M. O. Henning, served his time learning the engraving trade in Leipzig, Germany, with Breitkopf and Hartel. He came to the United States in August, 1880. He finally secured work in one of the few music engraving shops in New York City. First he worked for Max Heuschkel, then for Christian Huber. Both these shops employed German engravers and had but three of them including Mr. Henning.

In 1882 Mr. Henning established his own business in Dedham, Massachusetts, starting with about four or five men. This firm now employs twelve men and is one of the largest engraving establishments in the United States.[1.]

The first publishers for whom Mr. Henning did engraving were the Boston firms Jean White, W. H. Cundy and J. B. Millet. He now engraves for Boston and New York publishers, and has also done the engraving for some music volumes for the University of Michigan.

The works engraved by this firm are vocal and instrumental, classic and the better type of modern music. Illustrations of the kind of works engraved by them are as follows-

Oliver Ditson Company,

The Musicians Library

The Music Students Piano Course

The Philharmonic Orchestra Scores and Parts

The Analytic Symphony Series

1.) Statement of Mr. Oscar C. Henning.

C. C. Birchard & Company

Laurel Song Books

Dykema Modern Orchestra Traïning Series

E. C. Schirmer Music Company

Concord Series of books and octavo music

Commonwealth Library of Music

B. F. Wood Music Company

Wood Edition of Piano Music and Studies

Ginn & Company

Assembly Songs and Choruses

Home Edition, Volume II

Silver, Burdett & Company

Program Series of Orchestral Scores and Parts

School and college textbooks

Juilliard Music Foundation

Orchestral Scores and Parts of compositions by American composers

Oxford University Press

Oxford University Piano Course

Simon and Schuster Inc.

Songs and piano transcriptions by Gershwin

Orchestral Works of American Composers

Ernest Block - Concerto Grosso

America

Edgar Stillman Kelley - Pilgrim's Progress

Charles Loeffler - Evocation

Daniel Gregory Mason - Chanticleer

Three Pieces for Flute, Harp and String Quartette published by the Society for the Publication of American Music.

Henry Hadley - Some orchestral works

Frederick Converse - Some orchestral works.

Manicke and Delmuth

This firm was established at Dedham, Massachusetts in 1887. It has engraved for publishers in Cincinnati and New York, but mostly for Boston firms. Of recent years the music engraved has been classical or better class modern compositions.

They have engraved many of the important compositions for Arthur P. Schmidt of the Boston group of composers, Arthur Foote, George Chadwick, John K. Paine, Mrs. H. H. A. Beach, and also of Charles Dennee and Mrs. Gulesian.

Other Firms

The music printing firm, John Worley Company, has one engraver. The White-Smith Music Publishing Company has also an engraving department which has a complete equipment of music dyes for any class of work.

C. Present Music Printers

It is interesting to note that in the 1927 Census of Manufacturers the total business of 119 establishments of sheet music and book printing in the United States was valued at $17,146,715. New York State came first with a volume of $9,353,628. and Massachusetts second with $1,803,993. Pennsylvania and Illinois were the only other states doing a volume of business of over one million dollars annually.

Some earlier music printers in Boston were Andrew B. Kidder, 7 Cornhill, about 1850-1870; W. H. Oakes, 383 Washington Street, which firm did also engraving and publishing, 1847-?; Edward L. Balch, 34 School Street about 1860; Sampson, Davenport and Company, 47 Congress Street; Giles and Gould, 89 Washington Street, and Lenfest and Anderson, 21 School Street, both about 1870.

White-Smith Music Publishing Company

This firm started engraving, printing and binding a few years after its founding in 1867.

It was one of the first firms to use the lithographic process in its printing which is largely sheet music. The founder of the company also experimented some forty to fifty years ago with the photographic process but gave it up as the method was not perfected.

Besides its own publications this company has done printing of all types of music for large and small publishers located all over the United States, and individuals as far away as Cuba, Hawaii, South America and South Africa. English and Spanish guitar and mandolin

instruction books have been the principal works printed for the Spanish speaking countries, and English and French instruction books for Canada. It also helped to establish a music printing plant in Canada.

The John Worley Company

This firm was established originally in Philadelphia about sixty years ago as the Zabel Worley Company. Mr. John Worley withdrew from Zabel Brothers, who are still in business in Philadelphia, and came to Boston about 1904 or 1905. When Mr. John Worley died in 1922 Mr. Small who had been with the B. F. Wood Company took over the business and has been carrying it on ever since at 166 Terrace Street, Roxbury.

This company uses three methods of printing, the lithographic, photo-lithographic since the spring of 1927, and some typographic. It is the only Boston concern using photo-lithography and it does a considerable amount of that work.

When there is uncertainty as to the demand for a new composition, the printing for the small initial edition is often done by this process without engraving plates. This saves considerable expense. If it proves popular, plates are made later.

An innovation for later editions of works employed successfully for three years is the use of a tissue transfer negative taken directly from the inked engraving plate in place of the photographic plate for the impression on the zinc press plates.

This company prints all forms of vocal and instrumental music mostly for local firms, but does some for concerns located as far away as Texas, California and Hawaii. It has printed such works as "The Musicians Library", "The Music Hour" series, the music section of "The Musician", "Edition Wood" publications, the music section of Jacobs' Band and Orchestra Monthlies and important works of Edward MacDowell, George Chadwick, Arthur Foote and Ethelbert Nevin.

Stanhope Press - F. H. Gilson Company

This company was established in 1874, and is one of the oldest of the six to eight concerns in the United States using the typographic method. It specializes in music book printing and has printed for publishers located all over the United States. This firm shares the White-Smith Music Publishing Company building at 40 Winchester Street.

It has made improvements in the designs of various music type characters, such as the bars on eighth note stems, for a better balanced and more harmonious page. Any regular foundry type faces desired are used for the words.

More high grade hymn books have been printed by this company than by any other music printer in the country.[1.] These include -

The Pilgrim Hymnal -- Congregational Church
The Psalter -- United Presbyterian Church
The Methodist Hymnal -- Methodist Episcopal Church
Christian Science Hymn Book
Several hymn books published by the Century Company.

This firm has also printed many school music books as it specializes in school and college textbooks. 1.) Statement-Mr. F.H. Gilson.

Part III - INSTRUMENT MANUFACTURING

A. Pianoforte Makers

The importance of American achievements in instrument making is well illustrated by the fact that the best American pianos "serve as ideals for followers of Cristofori's art in every country of the globe. And the principal improvements which have placed the piano of today beyond comparison with its progenitors of half a century ago have emanated from the brain of our own instrument makers". 1)

1. European Predecessors

What has been accomplished can be better appreciated if we realize the status of the pianoforte in England, France and Germany, the centres of pianoforte making in the early nineteenth century.

Square pianos were first made in England by some Germans, Johann Zumpe and his fellows, who arrived there in 1760.

The Dutchman, Americus Backers, in 1772 made important improvements in the action substituting direct lever action for Cristofori's intermediary under-hammer. His invention is known as English action. There were also three strings to each note. 2)

1) American History and Encyclopedia of Music, p.313
2) James, Philip - Early Keyboard Instruments, p.54

In 1780 John Broadwood remodeled Zumpe's action, moved the wrest plank to the back of the case opposite the keyboard, brought the compass to five octaves -- FF to f3, substituted pedals for hand controlled levers to lift the dampers, and used crankshaped under-dampers in place of the "mopstick" arrangement. This improved and reconstructed instrument was patented in 1783. By 1794 the compass had been extended to six octaves -- CC to c4.[1)]

In 1786 John Geib, a craftsman of Longman and Broderip, incorporated the hopper into the action.

The term "grand" was first used for a pianoforte in 1777, and the first entry of a grand on Broadwood's books was in 1781.

Uprights in the last of the decade 1770-80 were constructed to resemble a bookcase and were called cabinet pianos. Not until 1800 was the idea of extending the strings below the level of the keyboard to the floor put into practical effect by John Isaac Hawkins of Philadelphia, who patented his upright in America, and in England in his father's name. The strings were perpendicular, had the same length as in a grand of that day, and had three in unison fixed to the same screw. It had "a complete iron frame within which the belly is suspended independent of the case; resistance to the drawing power of the strings is also met by metal rods at the back of the case; there is an upper bridge of metal and a system of tuning by mechanical screws; an

1) James, Philip - Early Keyboard Instruments p. 54.

equal length of string throughout; a hopper action anticipating Wornum's and metal supports for it. So many new ideas were surely never grouped before in one musical instrument. It is remarkable as containing the original essays for many improvements since made use of or re-invested...,It will now be seen why I give the rare distinction of originality in invention to Hawkins". 1) The instrument stood about five and a half feet high, and the frame containing the keyboard was pivoted in the manner of the falling front of a bureau to economize space. 2)

Not until 1820 was the great increase of tension and the use of thicker and heavier strings made possible by this change given real recognition. It is interesting to note that Mr. Stodard, the English employer of William Allen and James Thom who patented a metal frame for grand pianos, bought their patent and refused to enforce observance in order not to hinder further improvements.

In France Sebastien Erard made the first French square piano in 1777, and his first grand in 1796. One of the most important inventions which has made possible the modern pianoforte was an action which contained the germ of the double escapement. This "provided for a quick repetition of the stroke by releasing the key only a very short distance". 3) Though this improvement was made in 1808, it was not patented until 1821

1) Hipkins, A. J. -- "The Early Pianoforte p.111.
2) James, Philip -- Early Keyboard Instruments, p.57.
3) Ibid, pp.56 and 57.

by Erard's nephew, Pierre.

There was also a South German action, improved in Vienna, which was called the German or Viennese action. "This differed from the English action in that the axis of the hammer was not fixed but rose with the key lever at the end of which was a short strip of wood having a slot wherein the hammer butt was centered." 1)

These were the instruments which served as models for our early American makers.

1) James, Philip -- Early Keyboard Instruments, p.57

2. Beginnings of the Pianoforte Industry in the United States.

A few spinets were made in this country before the pianoforte. The Boston Gazette of September 18, 1769, stated "That a few days since was shipped for Newport a very curious spinnet being the first 1) ever made in America, the performance of the ingenious Mr. John Harris of Boston (son of the late Mr. Joseph Harris of London, Harpsichord and Spinnet Maker)". 2) His advertisement in the Boston Chronicle, November 14, 1768, showed him a newcomer then.

Another maker of spinets was Samuel Blythe of Salem. A fine specimen made by him in 1789 is described and pictured in Early Keyboard Instruments by Philip James. 3)

"It is quite possible that the first practical piano constructed in this country was made some time prior to 1803 by Benjamin Crehore, who lived in Milton, near Boston." 4) "Vose Reminiscences", based on historic researches in Milton, contains a picture of Crehore's first pianoforte made in 1790. He made only about ten to twelve a year. One of his pianos, a square, is on exhibition in the Music Division of the Boston Public Library. "His shop was the training school of John Osborne and the brothers Lewis and Alpheus Babcock who served their apprenticeship there." 4) He also made some uprights but they failed to stay in tune.

1) Daniel Spillane states in his history that it is proven that the first spinets made in the colonies were the product of Gustavus Hesselius of Philadelphia 1742.
2) James, Philip - Early Keyboard Instruments, p111
3) Ibid p.112 and Plate XXXII
4) American History and Encyclopedia, p.317

This business failed because of the competition of Mallet and Shaw. When the Babcock Brothers and Thomas Appleton, a Boston pipe organ manufacturer, went into business together at 44 Newbury Street in 1810, Crehore became a workman in their shop. From 1815-18 they were on Winter Street. Hayts Brothers, importers of musical instruments, were also added and the firm moved to Milk Street, where it remained until it was dissolved in the panic of 1819. Lewis Babcock had died in 1817. Alpheus was in business again in 1821 at 11 Marlboro Street, and in 1822 at Parkman's Market, Cambridge Street, with Captain John Mackay and the latter's brother, G. D. A. Babcock's half iron plate was invented about this time.

Babcock's pianofortes ranked very high as far back as 1822. In 1824 he won a prize at the First Mechanical Arts Exhibition of the Franklin Institute, Philadelphia, as follows -- "Premium no. 47 to the maker of the best horizontal piano is adjudged to A. Babcock of Boston for specimen no. 327 which is a horizontal pianoforte made for J. Mackay, Boston. It has received the high approbation of the judges. Every part of the interior mechanism has the highest finish and its tone and touch are excellent. Strings of the lower octaves are covered with flattened wire. It entitles its maker to the silver medal having been considered the best of the four square pianofortes exhibited." 1) In 1825, he again won a silver medal at a similar exhibit. After Captain Mackay became a partner of Chickering, A. Babcock went to Philadelphia in 1829 and joined a Mr. Klem who had been an agent for Babcock pianofortes.

1) Spillane, Daniel -- History of the American Pianoforte, pp. 85 and 86

Other instrument makers prominent in the early nineteenth century were William and Adam Bent. "A press notice of 1799 speaks of William Bent as an expert mechanic whose grand piano attracted much attention". 1) This business apparently started in 1798 as Bent & Green at 90 Newbury Street. From 1800 to 1807, William and Adam Bent were musical instrument makers at 26 Orange Street. Then William Bent alone made pianofortes at 24 Orange Street and in 1809 at 49 Newbury Street till he went out of business and moved to Philadelphia.

According to the "Columbia Sentinel", Mr. Mallet had a repository on Devonshire Street in 1805 in which he had for sale an assortment of English and American pianofortes including those of Francis Shaw. The latter came to Boston via New York about 1804 from London where he had been an expert pianoforte and musical instrument maker. "Shaw holds a significant place in the early Boston Records for he took out the first patent relative to an improvement in the pianoforte or to any musical instrument ever granted by the National Government to a resident of Massachusetts." 2)

John Osborne was one of the foremost pianoforte merchants of the country from 1815 to 1835. In 1819 on Newbury Street he had as apprentices Jonas Chickering, Lemanuel and Timothy Gilbert, John Dwight, William Danforth, and Elijah Bullard. In 1820, James Stewart, a Scotchman, entered into partnership with Osborne, Stewart was a pianoforte maker of ability and a fertile brain for improvements,

1) American History and Encyclopedia of Music, p.318
2) Spillane, Daniel -- History of the American Pianoforte p.54

among which was a better arrangement of the sounding board. The second patent issued to a Boston resident was given to him for this in 1822. 1) He was probably the first manufacturer to export pianofortes out of the United States for he had shipped to Havana and the West Indies while in Baltimore. When these partners disagreed, Jonas Chickering and James Stewart whom he had met in Osborne's establishment became partners in a shop on Tremont Street in 1823. This was the start of Chickering & Sons, whose presiding genius became the Father of the modern pianoforte. Osborne moved to Albany in 1829.

John Dwight, who subsequently became a partner of Newhall, applied for a patent in 1824, about sixteen months ahead of A. Babcock, for a "longitudinal iron bar", thus anticipating a minor feature of Babcock's iron plate.

Timothy and Lemanuel Gilbert began business separately in 1829. Lemanuel was out of business a while, but started again in 1839 on Washington Street. Timothy went into partnership with Ebenezer R. Currier, who had also been apprenticed to John Osborne. He[2] had obtained a patent in 1831 for a pianoforte "with a shifting action like the grand for horizontal instruments, also placing the keyboard midway so as to give a compass of seven octaves, according to the stringing diagram and other models". 3) He also patented a down striking action.

1) Spillane, Daniel - History of the American Pianoforte p. 85.
3) Spillane, Daniel -- History of the American Pianoforte, p.96
2) E. R. Currier.

Mr. George Vose has in his possession a beautiful instrument over one hundred years old made by Currier & Co. It has a perfect harp scale, a half iron plate, six octaves and one pedal. The case is finely finished crotch mahogany.

Some time about 1840 the firm Timothy Gilbert & Currier became very important in the trade and had many agencies scattered over the country. In New York they had a direct agency in 1848 and Berry and Waters were the agents. Timothy Gilbert petented in 1841 ideas and inventions relative to uprights and squares, and outlined a modification of the English flying action (tape check action), ideas afterward claimed by Wornum in England. 1)

"Timothy Gilbert anticipated the present upright action in use in the United States and bequeathed to the trade many very potent technical ideas in connection with the improvement and development of the upright." 2)

A stir was caused by their organ pianos in 1847, but the pianoforte part did not stay in tune. They were out of business in 1847, but their name was used until 1863.

Judging by the frequent forming and changing of partnerships, a skilled mechanic who had been trained in some good shop or factory started out for himself alone or with another such mechanic and presently dissolved that partnership to form another. Such makers were often spoken of as "secederes". Small capital was required to

1) Spillane, Daniel - History of the American Pianoforte pp. 90 & 91.
2) Ibid. p.46

start, but as businesses grew more became necessary and many changes of ownership were due to this.

What information the writer has been able to gather about other early firms from pianoforte manufacturers, dealers and tuners is summarized in Appendix I.

Along with the growth of pianoforte manufacturing in Boston has developed an occupation which has been taught to the blind all over the country with great success, namely, pianoforte tuning. This movement was started at the Perkins Institute and Massachusetts School for the Blind, founded in 1832 by Dr. S. G. Howe, with Lowell Mason as the first teacher. Mr. J. W. Smith was the teacher who instructed the blind to take a pianoforte apart, repair, put together and tune it. For many years now graduates of this school have cared for the tuning and repairing of the pianofortes of the Boston city schools.[1]

Aside from a few outstanding inventions like Erard's repetition action and Steinway and Sons' combination of the full metal plate and the overstrung scale, it is difficult to assign the improvements to any one manufacturer as the changes have been by gradual steps. Many experiments were tried for one that was really successful.

Furthermore, competition in this line has always been so keen that as soon as one manufacturer made a real improvement, others bought one of his instruments, took it apart, studied it and copied the idea. If the invention was patented, some way was generally found to produce the same effect by a construction sufficiently

1) Dwight, John S. - Memorial History of Boston, Justin Winsor Editor, p. 460.

dissimilar to avoid infringement. Improvements and inventions whose source is generally acknowledged are discussed under the respective manufacturers.

3. Importance of Massachusetts Manufacturers in the Industry as shown by Census Figures of 1860 and 1927.

The first census giving separate figures for musical instrument manufacturing was in 1860. This showed 223 establishments in the United States with a total invested capital of $4,431,900. Of these, 110 with an invested capital of $3,644,250 produced annually pianofortes worth $5,260,907. Massachusetts with 22 or one-fifth of the pianoforte establishments with a capital of $923,000 produced instruments worth $1,583,500, or 30% of the annual total.

In 1927, the latest census for which complete figures are available, 124 establishments made pianofortes. Of these, only 82 made primarily pianofortes and three solely on a contract basis. The total annual value of all instruments produced, upright, grand and electric was $75,490,681. New York State came first with 53 establishments and a product of $28,431,507, Illinois second with 22 establishments and a product valued at $17,668,781, and Massachusetts third with 10 establishments and a product valued at $6,614,451.

In the making of uprights, Massachusetts was sixth with 4940 instruments worth $1,356,113 out of the total of 150,407 pianofortes valued at $33,709,334. The production of electric pianofortes was given separately only for Illinois, which made over $2,000,000 worth, and New York. All other states made only 133 electric instruments worth $62,584. Massachusetts was third in the manufacture of grands with 7689 instruments worth $4,766,367 out of a grand total for all states of 61,759 pianofortes worth $30,732,850.

Thus Massachusetts has been important in the manufacture of pianofortes from early times to the present. These figures seem to indicate two trends. One is the growth in importance of the grand pianofortes. The other is the tendency to large-scale manufacturing and to consolidation shown by a decrease in number of establishments of 54% as compared with an increase in the annual value of their products of 310.7%. This trend is doubtless due to the need of reducing overhead and economizing in the purchase of materials of manufacture to help meet the inroads of the phonograph and radio on pianoforte sales during the present business depression.

4. Present Day Manufacturers.

Chickering & Sons.

History. 1)

As "The Oldest in America, the Best in the World", for many years a slogan of this company, it has a long and honorable history.

The founder of this company was Jonas Chickering, born in Mason Village, New Hampshire, April 5, 1798. He grew up in New Ipswich, New Hampshire, learning the trade of cabinet making. His interest in the pianoforte was aroused when he was sent for to repair the only one in New Ipswich, belonging to Miss Mary Montgomery, daughter of General John Montgomery. This pianoforte had been made in London in 1782 by Christofer Ganer. It is now in the New England Conservatory, to which it was bequeathed by a descendant of Miss Montgomery.

So Jonas Chickering came to Boston in 1819 and became an apprentice of John Osborne, where he mastered the details of pianoforte construction and met James Stewart, who became his partner in Stewart and Chickering in 1823. Their two-room shop was on Tremont Street in a building next to King's Chapel. There the first Chickering was made. This instrument, "Number One", now owned by Chickering & Sons, though thin and without the resonance of the larger instruments, is still sweet and singing in quality.

Mr. Stewart resigned in 1826 and returned to London to become associated with Messrs. Collard and Collard. Jonas Chickering, needing more capital for his growing business, formed a partnership

1) Dates are taken from the letter written January 29, 1930, for the Massachusetts Tercentenary Celebration by Miss Margaret E. Connell, Historian of Chickering & Sons.

in 1830 with Captain John Mackay, a prosperous sea captain and a former partner of Alpheus Babcock.

The firm then became Chickering and Mackay with a good-sized factory on Washington Street. Captain Mackay made frequent voyages to South America, where he sold the sweet-toned six-octave pianofortes in different parts and returned with rosewood and mahogany for cases. By 1839, this firm was supplying pianofortes to every available commercial point in the East, South, and as far West as civilization had advanced. By its establishment of the first agencies known all through the part of the country open to commerce, this company became the pioneer in the music trade of America. Even today, these six-octave pianofortes can still be found in Buenos Aires and other places in South America.

In 1841, Captain Mackay was lost at sea with his ship on what was intended to be his last trip. Mr. Chickering then purchased Captain Mackay's interest in the business from his heirs and conducted it alone under the name "J. Chickering, Piano Maker", employing three hundred men and turning out thirteen hundred pianofortes yearly.

In 1848, Jonas Chickering's three sons were admitted into the firm as partners, and the name was changed to "Chickering & Sons".

The first World Fair held in London in 1851 in the specially-constructed Crystal Palace was the first time when American pianoforte manufacturers were represented in a foreign exhibition. Chickering & Sons had an exhibit superintended in person by Mr. Jonas and Mr. Charles Francis Chickering, who returned with many awards and the First Prize Medal. Contacts were also established

with influential people and prominent European artists.

A great misfortune befell the company when the factory and its entire contents, including beautiful paintings, autographed portraits and mementoes given by great artists and prominent men to Jonas Chickering, were burned December 1, 1852, with a loss totaling more than one quarter million of dollars. Mr. Chickering at once purchased land in what was then called "The Neck", an undeveloped strip of land on the outskirts of the city leading to Roxbury and began building a new factory which when completed in 1855 was said to be the largest building in the United States under one roof with the sole exception of the Capitol in Washington, D. C. Dubbed "Chickering's Folly" at one time, it had a capacity for making five thousand pianofortes a year. Unfortunately, Jonas Chickering did not live to see it completed, as he died December 8, 1853.

The sons continued the business, Colonel Thomas E. Chickering having charge of the manufacturing aided by his younger brother, Mr. George H. Chickering. Mr. C. Francis Chickering, "who was one of the most accomplished scale draughtsmen of his time",1) settled in New York City in charge of the wholesale department which outgrew two locations, first at Broadway and Reade Streets and then at 11 East 14th Street. So Chickering Hall was built to provide suitable warerooms for demonstration and sale of the pianofortes with offices connected and a large auditorium for recitals. This was located at Fifth Avenue and 18th Street, and from its dedication in 1875 it became the musical centre of New York for twenty-five years. In 1901, the trend of business was away from its location, so the hall was given up, and the wholesale and retail departments

1) American History and Encyclopedia of Music, p.320

were moved to the Boston factory so that the entire business was under one roof.

New scales and other improvements were made from time to time by Mr. C. Francis Chickering, and the pianofortes were displayed at all exhibitions, both local and international, obtaining many first medals and awards which helped the company's prestige.

The business grew amazingly so that the most important cities in the United States had a representative selling Chickering pianofortes, "and many foreign countries had representatives regularly sending in orders".1) Over 200,000 Chickering pianofortes had been built up to 1932. These consisted of squares, discontinued some years ago, uprights, grands, players with the pianola player reproducing mechanism and Ampico pianofortes. In the last ten years practically only grands and reproducing instruments have been made. The pianofortes have been shipped to all parts of the world from Finland to India.

One of the most signal awards showing the company's world-wide standing was made at the Exposition Universelle, Paris, France, in 1867. A "First Gold Medal" for excellence had been awarded the Chickering pianoforte by the four juries of six hundred men whose duty it was to make decisions about awards. The Emperor, Napoleon III, in conjunction with the "Superior Council", decided that in addition to the excellence of its instruments, the contribution of the company to the advancement of music called for further recognition. So he issued a "Decree" naming "Mr. Chickering of Boston, Manufacturer and Exhibitor of Pianos, Chevalier of the Legion of Honor",

1) Tercentenary Letter by Miss M. E. Connell, p.7

and personally conferred the decoration on Mr. Charles Francis Chickering.

This is the highest award ever made to any pianoforte manufacturer and is now in the possession of the company.

Incidentally, it may be of interest to note that Mr. Chickering took one of these pianofortes, which had been carefully chosen, as a gift to Liszt in Rome. After playing on it some time before Mr. Chickering and his friend, Mr. Poznanski, Liszt gave Mr. Chickering what he had never before or since given any pianoforte manufacturer, a testimonial letter setting forth his supreme satisfaction with the Chickering pianoforte. This instrument was Liszt's favorite in Weimar, and it, with another Chickering, is now preserved in the Imperial Conservatory at Budapest, Hungary, by the Government in the room in which the composer left them.[1)]

In all, the company has received one hundred and thirty-one medals for its pianofortes shown at exhibitions in America and foreign countries. Those awarded at world fairs are as follows:-

Great International Exposition, London, England, 1851.

Exposition Universelle, Paris, France, 1867.

Exposition International de Chile, Santiago, 1875.

International Exhibition, Philadelphia, Pennsylvania, 1876.

International Exhibition, Sydney, New South Wales, 1879.

Cork International Exhibition, Cork, Ireland, 1883.

Crystal Palace Exposition, London, England, 1884.

World's Fair, Chicago, Illinois, 1893.

Panama-Pacific Exposition, San Francisco, California, 1915.

1) Tercentenary Letter by Miss M. E. Connell, p. 6.

A unique contribution of this company was a revival of the making of early keyboard stringed instruments and viols as an aid to providing the best in music. Arnold Dolmetsch, the greatest living authority on musical instruments and music of the 16th, 17th, and 18th centuries, was brought over for this purpose in 1906. This Swiss-French expert had a department in the factory at 791 Tremont Street, Boston. There, with the assistance of a few Chickering craftsmen, he made in four years a total of about 100 instruments, 33 clavichords, 13 harpsichords, a few virginals and spinets, several lutes, octavinas and psalteries, and the balance "Chests of Viols". Each of these last consisted of six instruments of the violin family, 2 treble viols - the viola d'amore - 2 tenor viols, and 2 bass viols - the viola da gamba + and the violone tuned an octave lower. The harpsichords had two banks and strings of 16 foot pitch.

Mr. Dolmetsch purchased all the necessary supplies, which included materials difficult to obtain, such as pearwood and quills from crows for plucking the harpsichord wires, and tested each instrument personally.

As most instruments of these types still in existence were in poor condition, the making of these fine replicas brought about a renaissance of playing on the instruments for which it was written the music of Bach, Scarlatti, Purcell, Rameau, and other early composers.

Mr. Dolmetsch gave concerts and lectures demonstrating the instruments, both locally and in many other cities and various colleges. He played all these instruments well, but usually played the viola d'amore or harpsichord, and Mrs. Dolmetsch played the

viola da gamba or harpsichord. Four series of concerts were given in Chickering Hall, Boston, in the years 1906, 1907, 1908, and 1909, Mr. Dolmetsch conducting, assisted by many members of the Boston Symphony Orchestra and other talent such as C. W. Adams, G. Longy, C. Lenom, A. Maquarre, A. Brooke, A. Sautet, F. Mueller, P. Sadony, M. Kunze, A. Gietzen, A. Bak, F. Mahn, Arthur Hadley, and the Misses Alice and Laura Kelsey.

Purchasers of these Dolmetsch harpsichords and clavichords include Mr. Arthur Whitney, who wrote "The Lesson of the Clavichord"; Mr. E. B. Dane, Chestnut Hill, Massachusetts; Mr. Henry Gideon, New York City, who gave many concerts and lectures using his harpsichord; Frank Taft, Montclair, New Jersey; the late E. F. Searles, Methuen, Massachusetts; O. G. Sonnecke, Washington, D. C.; John Wanamaker, Philadelphia, Pennsylvania; E. P. Warren, Liverpool, England; Ferruccio Busoni;and Smith, Wellesley, and Vassar Colleges.1)

There have been two noteworthy celebrations of the company's long period of service. The first was the Eightieth Anniversary held in Chickering Hall, Boston, April 14, 1903, with only employes of Chickering & Sons and their immediate families present. The program consisted of five songs sung by Miss Mary Ogilvie, accompanied by Mrs. S. B. Field, a short historical address by Dr. Edward Everett Hale, and pianoforte selections played by Mr. B. J. Lang.

The second was a three day celebration of the hundredth anniversary held in April, 1923. The series of events began with a

1) From 1911-1914 Mr. Dolmetsch had a department in the Gaveau Factory, Paris. Since then, he and his family have had a workshop and school at Haselmere, England, and conduct an annual "Festival of Chamber Music".

"Family Gathering" of officials and employees of the company in the great factory. This consisted of commemoratory exercises, a fine concert and the presentation of a gold watch to each of the thirty-one employees who had been with the company twenty-five years or more, and closed with a banquet and dancing.

The next day a bronze tablet commemorating the work of Jonas Chickering, the gift of Chickering representatives from all over the world, was presented at the factory before invited guests and the factory organization. The same afternoon a Centennial Concert was given in Symphony Hall. The program was opened appropriately by the Handel and Haydn Society and other numbers were given by the Boston Symphony Orchestra, MMes. Elly Ney and Germaine Schnitzer, Messrs. Guy Maier, Lee Pattison and Erno von Dohnanyi.

The closing event was a dinner at the Copley Plaza Hotel. Mr. Courtenay Guild was chairman of the National Committee and introduced the speakers. Mr. Calvin Coolidge, then Vice-President of the United States, was the principal speaker. Others were Mayor James M. Curley and Mr. Richard Lawrence. A concert program was given by Mr. von Dohnanyi and Messrs. Maier and Pattison.

The Chickering Brothers died one after another, Mr. Thomas E. on February 14, 1871; Mr. Charles Francis on March 23, 1891; and Mr. George H. on November 17, 1893. The men who had been associated with Mr. Jonas Chickering and later with Mr. George Chickering continued the business until 1901, when Chickering & Sons became one of the subsidiaries of the American Piano Company, a large holding company, along with William Knabe and Company,

and Foster Armstrong Company. It retained its own organization, officers and name. The manufacturing was moved out to Rochester, New York, about 1929. Haines Brothers, Marshall and Wendell and other companies have also become part of this larger organization. It had an output of eighteen thousand pianofortes a year in 1909, making it one of the largest industries of its kind in the world.

Inventions.

The mechanical improvements and inventions constitute the real reason why the Chickering pianoforte attained its world-wide eminence. "The two most prominent features in the recent wonderful development of the piano manufacture in America are the invention and gradual perfection of the iron frame and the introduction of the overstrung scale."1) Alpheus Babcock had been the first to introduce the iron plate into the pianoforte, patenting it in 1825, but it extended across only one-half of the instrument.2) Jonas Chickering made the first grand pianoforte with a full iron frame cast with the parallel bars in one piece. This invention, patented in 1837 and applied to the construction of grand pianos about 1840,3) was one of the epoch-making inventions which helped to revolutionize the pianoforte manufacturing industry.

The American climate necessitated an iron frame to sustain the tension of the strings so that the instrument could stand for some time without constant tuning. "For the successful introduction

1) and 3) American Cyclopaedia, Vol. XIII, p.492
2) Parker, Richard C. -- A Tribute to the Life and Character of Jonas Chickering, footnote p.45.

of the iron frame Jonas Chickering has been called the "Father of the piano as we know it today".1) Because the iron frame made a sharp thin tone, it was not generally adopted outside of Boston until after 1855.2) Then the extension of the compass to seven octaves made the resistance of the wood frame unequal to the tension of the strings.

In 1843 the house patented a new deflection of the strings by which strength was added to the frame.3) In 1845 Mr. Chickering invented the first practical method for overstringing grand and square pianofortes. This principle was applied to Chickering uprights in 1849, giving them a great advantage over those of foreign make in resonance and staying in tune. The invention of the circular scale for square pianos was another improvement of this company.

Patents were granted in 1868 and 1869 for a combination truss frame and other improvements in the construction of uprights. In 1872 the double bearing agraffe was patented. Other inventions have been along the lines of new scales and improvement of the action.

In 1901 the first "quarter grand" model, the smallest grand piano of modern construction, was introduced. It was perfected in 1904.

M. Welte and Son of Freiburg, Germany, and Ludwig Hupfeld of Leipsic were the pioneers in developing and marketing about

1) American History and Encyclopedia of Music, p.320
2) American Cyclopaedia, Vol. XIII, p.492
3) Jonas Chickering and His Work, p.37

1904 the modern reproducing piano. The first American reproducing piano which was the invention of Charles Fuller Stoddard of the American Piano Company was arrived at independently.[1] The instrument he perfected was introduced by this company under the trade name "Ampico". Chickering & Sons brought out the first Chickering with the Ampico in 1911. Any possible difficulty was avoided by an agreement with the Welte Company admitting the validity of their patent, and royalties were paid in exchange for rights in the use of master recordings.[2] These recordings had to be entirely re-edited for use on the Ampico.

A second American invention producing the same effect by different mechanical means is the Duo-Art of the Aeolian Company.

These reproducing pianos were all alike in general arrangement of pneumatics, in the division of the keyboard into halves for expression in playing, in possessing devices for automatic rerolling, recording and repeating, in elimination of the recorded expression and substitution of human control. The Ampico has the following special features: -

"Both a crescendo pneumatic system and an instantaneous accent pneumatic system which it can use in combination to control the air-tension behind the hammers. These systems may be operated independently for separate effects or concurrently for combined; thus producing an unusual smoothness in crescendo and diminuendo as well as a delicate shading. There is also an "amplifier" for special effects of volume and the extended

1) Encyclopedia Brittanica, Edition XII, Musical Instruments, Mechanical, p.1006
2) Statement of Mr. Spain of Chickering & Sons.

perforations in the music-sheet produce the greatly desired 'singing' quality of tone."[1])

Mr. Stoddard maintains a fine laboratory where the minutest details of musical expression are studied so that the mechanical playing of the Ampico used in the various makes of the American Piano Company possesses a beauty formerly undreamt of.[1])

Chickering pianos with the Ampico have been adopted by Harvard, Wellesley, Smith, Teachers' College, Columbia University, Exeter Academy, New England Conservatory, and many other schools and colleges for teaching music appreciation. An extensive library of Artists' Record Music Rolls has been developed of classical, American and popular dance compositions. Recordings have been made by about fifty artists and include such names as Harold Bauer, Teresa Carreno, Ossip Gabrilowitsch. Leopold Godowsky, Edvard Grieg, Josef Hofmann.

Other Contributions of Jonas Chickering.[2])

Jonas Chickering entered heartily into the musical life of Boston, influencing the whole course of music in the United States. He had a fine tenor voice so he joined the Park Street Church choir and the Handel and Haydn Society almost as soon as he came to Boston. He was Vice-President of that Society three years, President from 1843-49 and Trustee from 1831 till his death. While President, he acted as conductor for a while, leading the chorus and sometimes singing himself. He was chairman of the Music Committee of Trinity Church and sang in its choir until he died.

1) Encyclopedia Brittanica, Edition XII, Musical Instruments, Mechanical, p.1007
2) Tercentenary Letter by Miss M. E. Connell, pp. 3 & 4.

He was a true representative of American hospitality, entertaining and giving many struggling musicians the means for an education. His pianos and warerooms were freely opened for rehearsals and concerts of all concert-giving societies, amateur clubs and individuals. He was also one of the heaviest contributors to the Boston Music Hall enterprise.

It was through the united efforts of Mr. Chickering and Mr. Lowell Mason, then a professor of the Boston Academy of Music, that music was introduced into the Boston public schools, the former contributing the pianoforte and the latter giving his services gratis for a year in the Hawes School in South Boston for the experiment.

It is small wonder, then, that this citizen who took his part also as juryman, justice of the peace, vestryman and President of the Massachusetts Charitable Mechanic Association was once described by a friend as "like his pianofortes, Upright, Grand and Square".

The Chickering Halls.

In Boston there have been four Chickering Halls, the last being erected on Huntington Avenue near Massachusetts Avenue and opened February 8, 1901, with a concert by Mme. Antoinette Szumowska, M. Pol Plancon and the Kneisel Quartet. These Halls have been used for many recitals.

Chickering Hall in New York, however, is the one which is noted because it was such an important factor in the musical life of that city.[1] It was dedicated November 15, 1875, when it was opened for the first appearance of Hans von Bulow in America, with

1) For source of information in the following paragraphs see The Commemoration of the Founding of the House of Chickering & Sons, 1823-1903 Chickering Hall, N.Y. pp.79-90.

an orchestra under the direction of Dr. Leopold Damrosch and a Beethoven program. A remarkable series of concerts by Von Bulow and chamber music soirees with Dr. Damrosch, George Matzka and Frederick Bergner followed. No pianist who has come to America since has ever given so many concerts in so short a period in one hall as Von Bulow. Mme. Carreno-Sauret and M. Sauret with others gave concerts that first season.

In January 1876 the new organ built by Roosevelt was played by noted New York organists. It was used by many local organists for recitals and Frederic Archer of England gave his first American performance on it.

The hall was used by many choral societies, the Mendelssohn Glee Club, English Glee Club, New York Vocal Society, Harlem, Mendelssohn Union, The Manhattan Choral Union, the Choral Club, the Musurgia, St. George's Glee Club, Orpheus Glee Club, Banks Glee Club, Lenox Hill Vocal Society, Metropolitan Musical Society, Palestrina Choir and the Rubinstein Club.

String quartets appeared here, too; New York Quartet with William Mason as assisting artist on April 15, 1876; the quartet composed of Theodore Thomas, Joseph Rosenthal, George Matzka and Frederick Bergner; the Philharmonic Club led by Richard Arnold; and the Beethoven String Quartet led by Gustav Dannreuter. After the disbandment of Theodore Thomas' New York orchestra, Chickering & Sons tried to establish in 1878 a permanent orchestra with G. Carlberg as conductor. Remenyi and Wilhelmj were soloists.

In 1882-3 popular orchestral concerts were conducted by Philip Herfort and the "Historical Cyclus" of vocal concerts was

projected by Maurice Strakosch. The next season Mr. and Mrs. Henschel gave there the first of their joint song recitals.

In 1886-7 the conductor, Mr. Frank Van der Stucken, started a series of symphonic concerts in which he brought forward novelties, among them MacDowell's "Ophelia", part of J. K. Paine's "Nativity" and Berlioz' "Trojans in Carthage". The next year he gave five concerts devoted solely to works of American composers.

In 1887-8 Anton Seidl disclosed original and advanced ideas in conducting, and brought forward such novelties as Wagner's "Symphony in C" and Bruckner's "Fourth Symphony" in a series of three concerts.

In 1888-9 orchestral series were given by Theodore Thomas and Mr. Van der Stucken who gave concerts the following season also. Illustrated lectures on music were given by Dr. F. L. Ritter the latter season.

In 1890-1 the Boston Symphony Orchestra held there their New York concerts which were among the most influential given in New York. The Manuscript Society, founded to encourage American musicians by performances of their compositions, made its bow December tenth.

In 1898 an important series of orchestral concerts under the management of Chickering & Sons was given with Anton Seidl as conductor, and Franz Rummel made his appearance as a soloist. Other soloists were Xaver Scharwenka and Richard Hoffman.

Artists who made their American debut in this hall were Rafael Joseffy, October 13, 1879, who played Chopin's Concerto

in E Minor and Liszt's in E Flat with an orchestra under Dr. Damrosch; Edmund Neupert, the Norwegian pianist, who played Grieg's concerto dedicated to himself; and Mme Emma Nevada November 5, 1885. The Italian violinist, Teresina Tua, was heard there in the 1887-8 season, and Signor Campanini and Mme. Ilma di Murska on return visits. Vladimir de Pachmann and Mme. de Pachmann appeared there in April 1890.

The Madrigal Singers and Richard Hoffman, who had been playing the Chickering for fifty-two years, gave concerts there shortly before the close of the hall in 1901. Among novelties introduced to New York in Chickering Hall were Theodore Thomas' "Festival March", Brahms' double concerto, part of Saint-Saëns' "Samson and Delilah", Beethoven's "Ritter-Ballet", Grieg's "Autumn" overture and "Peer Gynt" suite, Rubinstein's "Don Quixote", Arthur Foote's suite and Tschaikowsky's "Fifth Symphony".

At various times since 1901 wholesale and retail departments have been established in New York. Once was in connection with Ampico Hall, which was used for several years in the same way as Chickering Hall. At present the building is used by the Knabe Company.

Artists Endorsing and Using the Chickering Pianofortes.

Endorsers of these instruments were Franz Liszt, Saint-Saëns, Gottschalk, Wehle, Gounod, Thalberg, De Pachmann, Carreno, Georg Henschel and von Bulow. Jenny Lind was probably the greatest singer ever heard in the United States when she made her tour in 1850 and was accompanied on the Chickering at her concerts.

A list of seventy-six eminent performers, teachers and composers for the pianoforte, all users of the Chickering, appears as "The Roll of Honor of the Chickering Piano" on pages 77 and 78 in the book issued in 1903 in commemoration of the eightieth anniversary of the company's founding. This included more European than American names, showing the instrument's standing in the musical world of that time.

Great artists of latter days using the piano on their tours include Busoni, von Dohnanyi, Elly Ney, Germaine Schnitzer, Mirovitch, Lhevinne, Dumesnil, Maier, Pattison, D'Alvarez, Telmanyi, and Chemet.

Vose & Sons Piano Company

This company, incorporated in 1889, was founded in 1851 by James Whiting Vose, who was first apprenticed to learn expert cabinet making. He then began to study piano construction, especially action and key making. After experience in cabinet work, organ and pianoforte key making and action building, he began to make pianofortes, first putting his name on them in 1851.

Pianoforte No. 1, made in the first factory at 323 Washington Street, Boston, is a square with a highly ornamental full iron plate, a beautiful rosewood case and a fine set of ivory keys. It still has a good tone and is now in the possession of the company in their fine modern factory in Watertown.

This company has always aimed to make a "pianoforte of exceptional musical value and durability", but has not gone in for the concert business. Its policies have been continued and developed along these lines for eighty years by Willard Atherton Vose and its present president, George Atherton Vose, son and grandson, respectively, of the founder. During this time more than 102,000 square, upright and grand Vose pianofortes have been sold to churches, educational institutions, professional musicians, and music lovers in all parts of the country, and a few exported. They have also made both upright and grand player pianos and Welte-Mignon electric reproducing pianos.

At the present time three-quarter grands and very small uprights are their most popular models.

These pianofortes are used and endorsed by such educational institutions as Chicago Musical College; Horner Institute of Fine Arts, Kansas City; University of Wyoming; University School of Music, Lincoln, Nebraska. A square Vose pianoforte has long been in use in ex-President Coolidge's home at Plymouth, Vermont.

Henry F. Miller Piano Company

This company was established by Henry F. Miller (1825-1884), who was a noted improvisateur. He first intended to become a pianist and organist, then worked in his father's jewelry store, and later studied pianoforte making with the firm of Brown and Allen. Then he worked five years with the Emerson Piano Company. He started his own business in 1862, being associated with N. M. Lowe and J. H. Gibson. After a comparatively short time, he became sole proprietor. After his death, his five sons continued the business.[1)]

Mr. Miller aimed for beauty of design and tonal supremacy. His instruments have been called "the sweetest toned piano in the world", and the concert grands have been used by artists abroad, as well as in the United States. Their standing was described as follows - "among art products of national manufacture, this company represents the highest attainments".[2)]

During three generations of manufacture at Wakefield, Mass., some 55,000 instruments have been made, some uprights, but mostly grands. Little mechanical change has been made in the last twenty-five years from the master instrument which had proven satisfactory.

1) From Pauer, Ernst -- The Pianist's Dictionary, p.148
2) American History and Encyclopedia of Music. p.324

Player pianofortes were made for about twenty years until a year and a half ago. Quite a business was done in these from 1920-1928. Pianofortes were also made with the Welte-Mignon reproducing mechanism for about twelve years until a year ago.

In 1931 the factory was moved to New York City to cut overhead costs and to obtain the advantages of large purchases by manufacturing in the same building as the Winter Company. It is entirely separate in organization and maintains its high quality standards of workmanship, however.[1] The Boston office for wholesale and retail is located at 234 Boylston Street.

George Copeland was brought up on and used Miller pianofortes, and the company sponsored his recitals in Jordan Hall. Other well-known American pianists who have used this instrument are Dr. Maas and Dr. Wm. H. Sherwood, who established the Sherwood Conservatory of Music in Chicago. Many teachers of pianoforte use this instrument at the present time.

The company has had two halls for concerts and recitals, the first on Washington or Tremont Street, and the second at 396 Boylston Street, from 1903-1926. This was for recitals by users of Miller Pianofortes.

1) Statement of Mr. Carter, Salesroom Manager, of the Henry F. Miller Piano Company, Boston.

Ivers & Pond Piano Company

About 1870 William H. Ivers, who had had a thorough mechanical training in piano building, began building pianos under his own name. Later it became Ivers & Son. Handel Pond, an accomplished young musician who had made his mark in a parallel line, felt that if his ideals of tone and musical quality could be incorporated into the Ivers piano, a new standard would be set. So, in 1880, the Ivers & Pond Piano Company was founded. In 1897 Mr. Ivers resigned as President, relinquished his interest and retired. Mr. Pond succeeded him in office until his death in 1908. The present heads of the company are his sons, Mr. Clarence H. Pond, President, and Mr. Shephard Pond, Treasurer, and his brother, Preston Pond. This is the other greater Boston firm which has its traditions still carried on by the family of the founder. Its office is at 258 Boylston Street, and its factory in Cambridgeport, Massachusetts.

This company has made a good quality piano for home and school use. In place of artist exploitation, it has done consistent national advertising for fifty years. From the start, it made squares, now obsolete, uprights and grands. In 1903 it added to its line grand pianofortes with player and the Welte-Mignon reproducing mechanisms. The company has made and sold between 79,000 and 80,000 instruments, distributed all over the United States, and a few outside. Because of their reasonable price and durability, as well as quality, "over 600 leading musical and educational institutions have endorsed this instrument by buying it for their own use, a record we believe unequalled in the annals of American piano building."[1)]

1) From Ivers & Pond Policy -- Past and Present 1880-1926

At one time, it received from the New England Conservatory the large order of one hundred pianofortes.

This was the first company to import into the United States in 1904 the electric driven reproducing instruments of M. Welte and Sons of Freiburg, Germany, and also the first recordings. The earliest style was an upright without keys which looked like a sideboard or ice chest.

This company has many patents for refinements of the mechanism of their instruments.

Mason & Hamlin Company

Since this company was organized in 1854 for the manufacture of reed organs, its earliest history is sketched in the section on Organ Builders. The manufacture of pianos was begun in 1880, and the first were brought out in 1882. These were uprights. Then followed baby parlor and finally concert grands.

By 1904 the quality of these pianofortes was recognized in the United States and abroad as was attested by the artists using them. When the company again required more capital to develop its business, the need was supplied by the Cable Company of Chicago, owned by the Haverfingers of Minneapolis, since this firm made no high-priced quality instrument. The management continued as before. When the Haverfingers sold their interest in 1924 to the American Piano Company, the Mason & Hamlin had won a reputation second to none, both in the United States and abroad. The American Piano Company introduced the Ampico into all styles of grands and the Welte Mignon reproducing mechanism into the uprights.

The seventieth anniversary of the founding of the company was celebrated in 1925 by a gathering of the company's employees in Jordan Hall. The program consisted of music by the Mason & Hamlin Employees' Orchestra and Harold Bauer, and an address by the President, Mr. Henry L. Mason. A silver bowl was presented by the company to Harold Bauer, who had played their piano ever since he came to the United States, twenty-five years before.

Up to the time the American Piano Company failed and the Aeolian Company bought Mason & Hamlin, about 35,000 pianofortes had been manufactured. The pianofortes are now made in the former factory of ~~the~~ Hallet Davis & Company in Neponset.

The Mason & Hamlin Company has contributed one major invention, the Tension Resonator in 1900. Various attempts had been made previously to overcome the loss in tone quality due to the inability of the slightly-arched wood sounding board of the pianoforte to retain its tension under varying climatic conditions which often caused the wood to contract and flatten. In this invention the underside of the arch or crown of the sounding board was re-enforced by bars at right angles to the grain of the board, which was parallel to the bridge, to help resist the downward pressure of the strings due to their 40,000 pound tension. There were also two cases, continuous outer and lower inner rims to hold the iron plate and sounding board. This construction gave greater strength, preserved the elasticity of the sounding board and also unified the various contributory tonal factors.

The result of this invention has been to give Mason & Hamlin pianofortes a remarkable singing tone. While it is still somewhat

of a question how permanently effective the tension resonator is in fulfilling its mission, this invention has spurred on the efforts of other pianoforte manufacturers to attain the same end.

This company has also developed the finest sustaining tone pedal used in a pianoforte.[1)]

A roster of prominent artists who have used this pianoforte is significant. William Sherwood played the first concert grand of Mason & Hamlin used with the Boston Symphony Orchestra, in 1895. Rachmaninoff played it in 1909 in the United States. Harold Bauer has used it in Europe and Australia, as well as in the United States from 1900-1925. Other users have been Ossip Gabrilowitsch, Ben Moisewitsch in Europe, Alexander Brailowsky, Maurice Ravel, Frank Sheridan, George Copeland, Martims Sieveking. Dame Melba was accompanied by one on a transcontinental tour of 50 concerts in the United States. She also bought two small grands and took them to her home in Australia.

The English pianists, Herbert Fryer and Katherine Goodson, were introduced to the United States and their tours managed by the company.

Poole Piano Company

This company was founded in 1893 by William H. Poole, who had made piano parts earlier, and incorporated in 1917.

It has made to date 25,000 upright, grand, and some player pianofortes sold at wholesale only, all over the United States.

1) Statement of Mr. Henry L. Mason.

While it is less expensively built than some makes, it is rated as a good pianoforte.

Mr. Shephard Pond, who is treasurer, has a controlling interest in the company. The instruments are now manufactured in a part of the Ivers & Pond factory in Cambridgeport.

M. Steinert & Sons Company

This firm was founded in 1860 by Mr. Morris Steinert, a skilled pianist and violoncello soloist. They were dealers and representatives first for Steinway and Sons, Weber and Gabler and the Aeolian Company, handling pianofortes, reed organs, the Aeolian Orchestrelle and pipe organs. He died in 1912 and his son, Alexander Steinert, became the head of the firm with his brother Rudolph, and their sons, Robert S. and Alan, respectively, also actively engaged in the business. Another son, Alexander Steinert, Jr., is one of the young modern American composers.

Several grades of pianofortes are made by this company, Steinert, their best make, and also the Woodbury, Jewett and Curtis. The Berkshire was also made by them earlier. The first named, brought out in 1903, was originally called the Hume pianoforte, for Mr. A. M. Hume, one of their salesmen. These instruments were made at the Jewett factory in Leominster, Massachusetts, under a fine supervisor, trained in Denmark. They were finished in Boston, back of the warerooms, which are now located at 162 Boylston Street. As these were high-priced pianofortes and there was no national publicity, only between three and four hundred of these had been sold by 1916, when the name was changed to Steinert. These are noted for

the Steinertone repercussion feature.

Players have been put in the Jewett uprights only, and a few of these are still being made. No reproducing pianos have been made by this company.

Mr. M. Steinert founded the New Haven Symphony Orchestra and his home was a musical centre. During extended travels in Europe he collected a variety of stringed and keyed musical instruments as a hobby, obtaining a specimen of every style from early 18th century to modern pianofortes. When he exhibited these instruments in the International Exhibition for Music in Vienna in 1892, it was found that they surpassed similar collections in European Museums. They were loaned to the World's Columbian Exhibition in Chicago in 1893, were used by Mr. Steinert on his lecture tour in the United States, which included lectures at Yale, Harvard, Columbia and other universities, and were finally donated to Yale University, where they are on display at Woolsey Hall.

Steinert Hall at 162 Boyston Street, which many consider the one perfect concert hall in Boston acoustically, was opened for general concert use on December 16, 1896, with a concert by the Kneisel Quartet. This organization gave most of its Boston recitals there. Harold Bauer gave his first recital there about 1900. Upon his return to the United States as a young man, Fritz Kreisler gave his first and later Boston concerts there, until the increased size of his audiences required a larger hall. De Pachmann also played there to sold-out houses. Carl Baerman, Alexander Siloti, Heinrich Gebhardt, Carlo Bunamici and Felix Fox have also given recitals there.

1. Beginnings of Organ Building in the United States.

The first real impetus to instrumental music in America came through the introduction of organs into the churches. How reluctantly this was done is shown by the fact that the organ willed in 1713 by Thomas Brattle to Brattle Square Church, Cambridge, Massachusetts, was declined. Provision was made for the organ in case of refusal to go to King's Chapel on the same terms, namely- it was "given and devoted to the praise and glory of God in said church if they shall accept thereof and within a year after my decease procure a sober person that can play skilfully thereon with a loud noise."[1] The organ sat on the porch of King's Chapel for seven months before it was unpacked. This instrument, set up in 1714, has long been considered the first pipe organ used in a church in the Colonies. It was the first pipe organ in New England and probably the second in the Colonies, since Mr. Lahee in his "Annals of Music in America" states that the first pipe organ to reach America from Europe was placed in the Episcopal Church at Port Royal, Virginia, in 1700.[2] Apparently it was difficult to find a good sober organist here as Edward Enstone came from England soon after 1714 to be the Brattle organ's second organist. In 1756 it was removed to St. Paul's Church, Newburyport, Massachusetts. In 1836 it was sold for $450. to St. John's Church, Portsmouth, New Hampshire, where it is now in the gallery.[3]

In 1733 the second organ imported into New England was given by Bishop Berkeley to Trinity Church, Newport, Rhode Island after its refusal by a church in the town of Berkeley. This had 13 stops and

1) Lahee, Henry C. Organs & Organ Building in New England - New England Magazine, December 1897, p. 487.
2) Lahee, Henry C. Annals of Music in America, p. 3.
3) Goodrich, Henry A., Church Organs: Some of the Early Builders of New England, p. 5.

498 pipes as compared with the six stops and relatively few pipes of the Brattle organ.[1] "This was in use for 111 years when it was reconstructed by Henry Erben of New York,the case and two stops being retained. The other stops, action and keyboard in a pine case went in 1850 to St. Mary's Church, Portsmouth, Rhode Island. In 1880 the interior organ including the two stops went to Kay's Chapel, Newport, and Hook & Hastings built a new organ within the original case.[2]

The third organ imported into New England was for the famous old North Church, (Christ Church). It was placed there in 1736.

In 1743 an organ built by John Clark of London was imported for St. Peter's Church, the Episcopal Church of Salem.

Who built the first organ in America seems to be in dispute for Mr. Lahee states that the first pipe organ completed in this country was built by John Clemm and placed in Trinity Church, New York City in 1737 while Mr. Spillane who had access to the Philadelphia Historical Society records claims that Mathias Zimmerman built an organ in Philadelphia before 1737.

The first attempt at organ construction in New England at any rate was a large organ erected by Edward Bromfield, Jr., who later essayed harpsichords about which no information is available. This organ, built in 1745, "had two rows of keys and many hundred pipes, his intention being 1200, but died before he completed it."[3] This organ was moved during the siege of Boston from the Old South Church to a store belonging to William Phillips for safe keeping. It was unfortunately burned there so that we cannot see the instrument of which was written "the workmanship of the pipes and keys

1) Lahee, Henry C.- Organs and Organ Building in New England, New England Magazine, December 1897, p. 488.
2) Ibid, p-489.
3) A Hundred Years of Music in America p. 325.

surprisingly nice and curious, exceeding anything of the kind that ever came out here from England".[1.]

In 1752 an organ was built by Thomas Johnston for Christ Church of Boston to repalce the one imported in 1736. "The organ he built for the Episcopal Church of Salem now (1889) in the possession of Hook and Hastings had but one manual and six stops. On the name board is an inscription in German text, in ivory as follows-'Thomas Johnston, fecit, Boston, Nov., Anglorum, 1754.'"[2.] "This organ replaced the one imported only nine years earlier. He died in 1768 and was succeeded in organ building by Dr. Josiah Leavitt, previously a practising physician, who for a number of years engaged in the business."[3.]

"The Brattle organ was replaced at King's Chapel in 1756 by a new instrument imported from London, where it had been built by Adrian Smith. It is said that it was sent as a gift from the King to the Church of England in Boston and that it was selected or approved and played upon by no less a musician than George Frederic Handel. This instrument was in use unchanged 104 years and was then in 1860 enlarged by Simmons & Wilcox. It has been repaired and enlarged twice since that year by Hook and Hastings, the old case and a few of the original pipes being retained on account of the historical associations. The old crown torn down in the Revolution has been replaced."[4.] The present organ is of Skinner manufacture.

1.) Hood, George, A.History of Music in New England, p. 152.
2.) A Hundred Years of Music in America, p. 326.
4.) Lahee, Henry C., Organs & Organ Building in New England, New England Magazine, December 1897, p. 488.
3) A Hundred Years of Music in America, p.325

Christ Church, Cambridge, celebrated in 1764 the inaugration of an organ made by Snetzler of London, a German artist, the best maker of the day. This organ figured in the American Revolution in 1775, when the church, colleges and other buildings in Cambridge were occupied as barracks by the provincial troops after the Battle of Lexington, "and the window weights and organ pipes were taken by the soldiers and molded into bullets which on June 17 were a part of the ammunition used at Bunker Hill."[1.] The organ was repaired in 1790 and did good service until 1844 when it was replaced by a new instrument. This history was related by Mr. John Bachelder of Cambridge when he presented the relics to the New England Conservatory of Music in 1884.[2.]

William Selby, a prominent Boston organist from 1772-1789 helped get better concerts and choruses, the first recorded concerts having been held December 1731 in Boston, 1736 in New York and the first song recital in America in Charleston, South Carolina, in 1733.[3.]

The Brattle Square Church apparently repented its earlier decision and in 1790 ordered an organ built in London. Even then there was some opposition to its use by some church members.

Other early New England organ builders were John Rowe 1795 to 1812 and Adam and John Geib 1808-1847. The Geibs were supposed to have built the organ used in North Church, Salem.[4.]

1.) A Hundred Years of Music in America, p. 325.
2.) A Hundred Years of Music in America, p. 326.
3.) Lahee, Henry C., Annals of Music in America, P. 4.
4.) Lahee, Henry C., Organs and Organ Building in New England, New England Magazine, December 1897, p.492.

The first important organ builder of America was William M. Goodrich born at Templeton, Massachusetts, 1777. He came to Boston about 1799, built his first organ about 1805, and pianofortes from 1822.[1] His shop was in Parkman's Market, Cambridge Street, Boston.

He was a self-taught and exceedingly ingenious mechanic, student of general knowledge, diligent investigator, with a correct musical ear and considerable proficiency in music. He united these facilities in his devotion to organ building with such success that during the time he continued in business 1805-1833 but three foreign organs were introduced into Boston, while his instruments became known throughout the whole United States.[2] His brother worked with him for twelve years, before commencing business with Thomas Appleton.

"In voicing and tuning instruments William Goodrich has scarcely been surpassed. His reeds in particular were smooth and harmonious and mingled well with the diapasons without overtopping them and destroying their character."[3]

"Eben Goodrich went to Boston from Templeton at an early age and earned his first money there by drumming for the Ancient and Honorable Artillery, having previously been drummer for his father's company in Templeton. He not only had unusual mechanical genius, but was also a great lover of music, played the organ, violin and clarinet. His music teacher was Francisco Masi, an Italian of celebrity. From correspondence with his son in Brooklyn (1902)

1) Boston Music Directory, 1929-Significant Names in Boston Music History, p.9.
2) A Hundred Years of Music in America, p.325.
3) Parker, Richard G. - A Tribute to the Life and Character of Jonas Chickering published 1854, footnote p.45.

it appears that Mr. Goodrich had a most excellent ear for music as was evident in the voicing of his organ pipes. With these qualifications added to his mechanical ability, he made rapid progress in his brother William's factory. He could build every part of an organ from bellows to swell.

"Their shop was located on Milk Street, Boston, where they also engaged in the manufacture of pianos. Timothy Gilbert, one of the veteran piano makers of Boston, worked in their shop....Eben Goodrich at that time introduced the sounding board now (1902) in general use. Before that, the short board of the harpsichord was used. But his greatest invention was the musical reed of the reed organ which he then used merely as a stop in his parlor organs.

"Lowell Mason, who was an intimate friend, urged him to make an entire reed organ. Later on, Mason's son, in company with Hamlin, of the well known firm of Mason & Hamlin, commenced the manufacture of entire reed organs.....Mr. Goodrich used the reed stop in his organs 14 years before any other reed was known. After his death numerous letters were found to brass ~~dealers~~ founders, giving directions for forms and dimensions of castings for his plates. An old Chinese instrument made of cane hung over his desk, from which he probably obtained his idea of the famous reed. His shop turned out about 160 organs of different kinds and sizes. Among the large church organs was one each for Dover, New Hampshire; New Bedford; Boston; Scituate, Massachusetts; Nashua, New Hampshire; a church in Watertown, Massachusetts, afterwards destroyed by fire; and a Catholic Church in Charlestown, Massachusetts. He was intimately acquainted with Bishop Cheverus, first Catholic Bishop of Boston, and through his influence secured contracts for several

organs for Catholic churches largely in the South. His first reed organ was presented to Gilbert Stuart, the most eminent portrait painter of his time. This was the first reed organ ever made, and a few years ago (1909) was still in existence in Newport, Rhode Island.....Eben Goodrich died in 1841 and his brother, William, some years previously."[1].

About 1810 Thomas Appleton, a brother-in-law and at one time associate of William Goodrich, went into business with the Babcock Brothers and a little later the Hayts Brothers were added.[2]. After the firm's dissolution in 1819 Appleton carried on organ building with Ebenezer Goodrich and later Corri as voicer and tuner. Later he manufactured organs in company with Mr. Warren, the latter subsquently moving to Montreal where he carried on the business.[3]. Appleton and Warren probably built the first organ in Appleton Chapel, Harvard University.[4].

Thomas Appleton built good tracker action organs, many with 3 manuals," 35 for Boston alone and more than 100 for other cities. His first complete instrument was the Church Green organ used for a time in a church corner of Summer and Bedford Streets, Boston. This organ was afterwards removed to a Baptist Church in Providence, Rhode Island, where it was used until about the time of the great Boston fire. Then it was brought back to Boston and placed in the new South Church, corner of Tremont and Camden Streets. It was afterward

1.) Goodrich, Henry, A. - Church Organs: Some of the Early Builders in New England. pp. 9-11
2.) See page89.
3.) A Hundred Years of Music in America p. 326
4.) Statement of Mr. James Cole.

partially rebuilt by George Ryder. One of his most celebrated organs was built for the Handel & Haydn Society and was used by them in Music Hall, Boston until the great German Organ was imported. Mr. Appleton, who was one of the noted men of Boston, died in 1872 in the 87th year of his age."[1] When in business alone he built the organ in Barnard Memorial Chapel, Boston. This had two manuals, one and a half keyboards, the lower to "40 G" only swell to middle "C" and twelve pedal notes.[2]

An interesting example of an early English organ is one bearing the date of 1805 built by William Gray now on exhibition in Fogg Art Museum, Cambridge. It was probably used in Holden Chapel at Harvard University, which owns it and had it restored by Mr. James Cole.

"Organ-playing in this country was given a stimulus when the great organ in Boston Music Hall was opened November 2, 1863. This large instrument was the first thorough concert organ in the country. A group of organists, B. J. Lang, John K. Paine, Eugene Thayer, S. P. Tuckerman, John H. Wilcox and George W. Morgan were the first to play on it."[3] It took five years for E. F. Walcker and Cie of Ludwigsburg, Germany, to build this great organ, 47 feet wide, 18 feet deep, 70 feet high, with 4 manuals, 89 speaking stops, 58 note keyboards and 5474 pipes, weighing nearly 70 tons.[4] Its influence on American builders,[5] notably, Hook and Hastings, the Hutchings Company, and the Roosevelt Company of New York, and on

1) Goodrich, Henry A. - Church Organs; Some of the early builders in New England, pp. 8 & 9.
2) Statement of Mr. James Cole.
3) Fisher, William Arms - Notes on Music in Old Boston, pp. 45 & 46.
4) Lahee, Henry C. - Organs & Organ Building in New England, New England Magazine, December 1897, p. 496.
5) Covell, William King - The Boston Music Hall Organ p. 4.

the choice of occupation made by many who became leading organists of the country is so important that its later history is given here. It was used there for only about twenty years and then removed because its pitch, nearly a semitone above International pitch A 435, made it too high to be used with the Boston Symphony Orchestra and there was not enough money to have it lowered at that time. Furthermore it had become so badly in need of repair through lack of experience of those in charge that it could not be used. It was sold for about $55,000 in 1884 to W.A.Grover, taken down by the Hutchings Organ Company and stored until Edward F. Searles of Methuen, Massachusetts, purchased it in 1897. He had obtained control of the James E. Treat Company and reorganized it as the Methuen Organ Company. This company rebuilt the organ with new chests, reservoirs and mechanism, but retained the pipes almost as made except that they were cut to lower the pitch to international and two new pipes were added to each stop to extend the compass to sixty-one note keyboards.

The rebuilt organ was set up in a hall built for the purpose in Methuen and the reopening recital, December 9, 1909, was given by Mr. Everett E. Truette, After Mr. Searles died the organ was purchased in 1931 by Mr. Ernest M. Skinner, who is making some further changes.

What the Boston Music Hall organ did for the development of the modern American pipe organ may be judged from the following. Previous pipe organs of American make had no balancing swell pedal, no overhanging keyboard but sliding doors, no terraces for draw knobs, no notes below second C, generally a thirteen hole pedal

keyboard with only 1 or 2 stops belonging to it, no vox humana, no pneumatic action or crescendo pedal. No organs with pneumatic action were built in the United States before 1867, and none with tubular action before 1880.[1] The Odell Company was the first New York builder to adopt it. The need for pneumatic action especially in large organs is shown by the slow response to the organist's efforts, so that "the organist was obliged to play by rule and shut his ears to the result," and by the great amount of strength required to play mechanical action instruments. "The old organ in Trinity Church, New York, one of the first large organs built in this country, required when the full organ was on a pressure of nine pounds on each key in order to open the valves of the pipes. When the organist was using full chords requiring every finger and both feet, the power exerted was sufficient to lift him bodily from his seat."[2]

It should also be noted that American organ builders only too frequently have been handicapped by faulty acoustics in building construction.

1) Statement of the organ builder Mr. James Cole.
2) Lahee, Henry C. Organs and Organ Building in New England, New England Magazine, December 1897, pp. 502 & 503

2. Importance in the Industry of Massachusetts Organ Manufacturers as Shown by Census Figures Especially for 1860 and 1927.

in 1860 there were in the United States twenty pipe organ building establishments with an invested capital of $184,000. and an annual product worth $324,750, and forty melodian establishments with an invested capital of $418,400, and an annual product worth $646,975. Massachusetts had at that time seven pipe organ building establishmants with a capital of $81,500, an annual production value of $161,000. and ten melodeon establishments with a capital of $57,900, and an annual product worth $114,670. Thus it made almos fifty per cent of the pipe organs and seventeen per cent of the melodeons.

In 1888 the pipe organ builders south and west of Greater Boston were located as follows - one in Springfield, Massachusetts, five in New York, three in Philadelphia, several in Chicago and a few in the middle west.[1)]

By 1905 the reed organ trade was centralized in the Middle West, especially Illinois, but also was carried on in Michigan, Indiana and Ohio on a large scale. The pipe organs were not centralized, though more high grade instruments were made in Boston than anywhere else. Ohio and Illinois were large contributors.[2)]

In 1927, the latest census for which complete figures are available, there were a total of sixty-three pipe and reed organ establishments in the United States with an annual product valued

1) Statement of Mr. James Cole.
2) See American History and Encyclopedia of Music. The Music Trades p.328

at $17,167,408. The number of instruments of each type and their value is shown for the United States and Massachusetts, as far as the figures are available for the years 1905, 1921, and 1927, in the table below.

Number and Value of Reed and Pipe Organs Manufactured-[1)]

	1927		1921		1905
Kind of Organ					
Reed	U. S.	Mass.	U. S.	Mass.	U. S.
Number Instruments	3,091		7,879		113,065
Value	$385,230		$748,314		$4,162,319
Pipe					
Number Instruments	2,471	92	2,187	58	901
Value	$16,782,128	$1,538,123	$8,963,011	$789,227	$1,989,979
Total					
Number Instruments	5,562	92	10,006	58	113,966
Value	$17,167,408	$1,528,123	$9,711,325	$789,227	$6,152,298

Massachusetts as appears from the above is no longer manufacturing reed organs. Complete figures by states are not given in the 1927 census in cases where the production value would represent the product of just one manufacturer thus showing his business. Consequently the exact rank of Massachusetts is not available. Among the states which are shown the order is as follows:

State	Number of Establishments	Number of Pipe Organs	Annual Value
New York	13	463	$2,822,880
Illinois	8	401	1,575,026
Massachusetts	5	92	1,538,123
California	6	157	1,082,574

These figures indicate that Massachusetts built large organs because less than a quarter of the number of Illinois organs were valued almost

1) There is an unexplained discrepancy between the production value figures in the summary for this industry and those given under the individual states. The writer has used the summary figures assuming them to be more complete.

as much as those of Illinois, while a fifth as many as were built in New York had more than one-half their value.

3. Important Pipe Organ Builders Out of Business.

Whatever information the writer has been able to obtain about other early pipe organ manufacturers is presented in Appendix II of this paper. The James Cole, George S. Hutchings, Simmons & Wilcox, and Woodberry Companies are discussed more in detail.

Simmons & Willcox

This company was Simmons & McIntire in 1847 located on Cause-Way Street. By 1850 the firm name was changed to W. B. D. Simmons & Co. In 1856 it had become Simmons & Fisher and had moved to No. 1 Charles Street. Mr. Willcox was associated with the company them. Within a year or two the name had changed to Simmons & Willcox. By 1870 Mr. Willcox had apparently left, for the company was again W. B. D. Simmons & Co., which it remained until it went out of business within the decade 1870-1880.

While this company was in existence it built some of the finest organs of that period, notably those located in

St. John's Church, Troy, New York, built in 1853. This was "a first class instrument with 39 registers, arranged, 14 in the Great organ, 8 in the Choir organ, and 12 in the Swell Organ, and 5 couplers."[1]

Citadel Square Church, Charlestown, South Carolina, built in 1856 by Simmons & Fisher. "It was the largest organ yet built in the country."[2]

St. Joseph's Church, Albany, built in 1859. This had 3 manuals of 58 notes each, a pedal organ of 10 stops,

1) Dwight's Journal of Music, Vol. 7, May 5, 1885, p. 38.
2) " " " " " 9, September 27, 1856, p. 205.

and a total of 50 stops. It was 29 feet wide, 40 feet high and 36 feet deep from the front to the rear row of loud pedal trombone pipes. In addition "the pneumatic pressure takes the blow from his fingers, and throws it back upon the bellows blower, so that the touch is never harder than that of a grand piano." 1)

Appleton Chapel, Harvard University, Cambridge, built in 1859. This had 3 manuals of 56 notes, 27 pedal keys, 56 registers musical and mechanical, and 2300 pipes. "Some of these (imitation stops) were introduced for the first time in an American instrument. Of these we may note the German Viola di Gamba,.....the kindred tone of the Viola d'Amore .....Then there is the Flute Octaviante, that curious much-heard-of-thing, the Vox Humana....the 16 foot Fagott in the swell, which with its kindred Oboe, are here of the richest reediest quality; the Spitsflöte, ...the 16 foot Posaune, or trombone in the pedal, ...the Vox Angelica.....the Aeolina,.....the Cornopean and the Corno di Bassetto. These were all spoken of then as "fancy stops". It had "a full swell pneumatic great organ and Tacit pneumatic". 2) The crescendo and diminuendo of a swell arrangement was spoken of as probably to be added.

When the King's Chapel organ was rebuilt in 1860 it had 3 manuals of 56 notes, a pedal organ, and 38 stops. Some of the diapasons, mixtures and other pipes were retained. 3)

2) Dwight's Journal of Music Vol. 15 May 14, 1859, pp. 53 & 54.
3) " " " " " April 21, 1860, p. 31.
1) " " " " " " September 17, 1859, pp. 198 & 199

St. Ignatius' Church, Baltimore, built in 1860. This had 3 manuals, a pedal organ and 30 stops.[1)]

St. Paul's Cathedral, Louisville, Kentucky, built in 1860 also had 3 manuals of 56 notes, a Pedal organ, 35 stops.[2)]

Church of the Advent. This organ was removed from Williams Hall and placed in this church in 1865. It was "built by W. B. D. Simmons & Co. was always considered one of the best of their many excellent works. It had Great, Swell, Choir and Pedal Organs with Pedal Check and Bellows signal, and 51 draw stops." [3)]

George S. Hutchings Company

The first appearance in the Boston Classified Business Directory of the name Hutchings as an organ builder is as Hutchings Plaisted Company in 1873 at North Grove Street, corner of Cambridge. By 1890 the George S. Hutchings Company of 23 Irvington Street, appears. Toward the end of its existence the Company became the Hutching's-Votey Organ Company of Cambridge. It went out of business about 1915, near the time of Mr. Hutching's death.

The business of Hilbourne L. Roosevelt, a pipe organ builder of many innovations, was merged with this company. He built the organ in the Garden City, New York, Cathedral of one hundred and fifteen stops, the second largest in the United States at that time, the Chicago auditorium with one hundred and nine stops being third.[4)]

1) Dwight's Journal of Music Vol. 15 May 19, 1860 p. 63.
2) " " " " Vol. 155, July 21, 1860, p. 134.
3) " " " " " 25 October 28, 1865 p. 128.
4) American History and Encyclopedia of Music p. 328.

Mr. Hutchings, while not himself a voicer, gathered a wonderful group of workers who assisted him in building only organs of the finest quality. This company built between two and three hundred organs mainly for New England, both church and concert organs.[1] The earliest organs had the older tracker mechanical action, but later ones had pneumatic and electrical action.

Among the organs built by this firm are the following - Symphony Hall, Boston, fifty six stops, one of the finest organs in the United States;[2] Mission Church, Roxbury; New Old South, Boston, before it was rebuilt; the organ in the second church chancel at Trinity, Boston; the Church of the Advent; Woolsey Hall, Yale, New Haven, Connecticut, rebuilt by the Skinner Company; University of Michigan since rebuilt. In a table dated 1897 the organ in St. Bartholomew's Church, New York City, built by the Hutchings Company was listed as the ninth of the 22 largest organs in the world. It had 4 manuals, 98 speaking stops, 26 mechanical stops, 19 pedal movements, 36 piston combinations, 179 tonal stops and 6042 pipes. The average size of the organs of most of the large churches and cathedrals of Europe at this same time was about 3 manuals, 30-40 stops, and 2000-3000 pipes.[3]

This firm also made under a contract an organette with one keyboard of one and half octaves which played only perforated music.

Many times it is difficult to determine to which firm credit for an invention is due. Competition has been so keen that as soon as an improvement was made by one company others copied it, if not patented, or if patented, found some way to produce the effect by just enough difference to avoid infringement.

1) Estimate of Mr. Ernest M. Skinner.
2. American History and Encyclopedia of Music p. 328
3) Lahee, Henry C. Organs and Organ Building in New England p. 502.

Beside the organs themselves which are among the finest American organs ever made this company has contributed the important invention of the rotary fan for blowing organs, known as the "Sturtevant Blower Fan". Their organs in New York Avenue Methodist Episcopal Church in Brooklyn and one in a Columbus Ohio church built at least forty years ago are two of the earliest in which these fans were used. This is now well nigh universally used both in the United States and Abroad.

The Skinner replica of the Willis 16' low C Trombone register was first made in this factory after Mr. Skinner's return from a visit to England.[1)]

James Cole

This company started in 1886 as Cole and Woodberry at 99 Bristol Street, Boston, Mr. Cole and the Woodberrys having been fellow workers at ~~the~~ Hook and Hastings. A little later Mr. Cole was in business by himself until the World War which made the continuance of the business exceedingly difficult. Since that time he has acted as a sort of consultant and has repaired, rebuilt, voiced and tuned pipe organs.

This company has built some five hundred church and residence organs located all over the United States.

Among the noteworthy organs built by the James Cole Company are the following -

Saint Martin's in the Fields, Providence, Rhode Island.

Saint Patrick's, Providence, Rhode Island.

Saint Michael and All Angels, Baltimore, Maryland.

1) Barnes, William H. Contemporary American Organ p. 72.

This was the first electric action organ built by this company and one of the earliest electric action organs in the country.

Stetson University, Deland, Florida, three manual tubular action.

Holy Trinity, Geneva, New York, tubular action not changed.

Created much interest at the time of its erection.

Saint Luke's, Germantown, in conjunction with Mr. Carlton Michel and the Hutchings Company. This was a three manual tubular organ of four sections and an echo organ built in 1895. It was rebuilt in 1920 and converted into an electric action.

Jesse Woodberry and Company

The Woodberry brothers learned organ building with Hook and Hastings, where they built the small organs. They started business for themselves at 399 Albany Street, Boston. In 1886 they were associated with Mr. Cole in Cole and Woodberry. In 1888 the firm of Woodberry and Harris was listed in the Boston Directory as making church, chapel, and chamber organs, and enlarging and rebuilding old pipe organs. Finally in 1894 it became Jesse Woodberry and Company until he retired from business in 1910.

This firm built good quality church and a few residence organs all over the United States, the largest and latest all electric. Among their notable church organs are the following -

Tremont Temple, Boston - pneumatic two manuals and twenty-eight stops, rebuilt and enlarged since.

Saint Mary's, Charlestown, Massachusetts,

Church of Redeemer, New Haven, Connecticut.

Saint Paul's Episcopal, New Haven, Connecticut.

Christ Church, Rochester, New York.

Saint Dominick's Roman Catholic, San Francisco - three manual.

Saint Patrick's, Lowell, Massachusetts, four manual.

A fine residence organ was built in the home of

Mr. Baxter, a Portland, Maine Lawyer.

4. Reed Organs.

Early Development.

The reed organ or melodeon is a keyboard instrument deriving its tone from a free reed which vibrates upon the introduction of air.

"Known from an early time in China" they were greatly developed in 1810 by a Frenchman named Grenié.[1] The first instrument of real importance embodying the free reed was the Harmonium invented and patented including the name in 1840, by Alexander Debaine in Paris. The French Harmoniums were generally constructed on the "force system" in which the wind apparatus forces air upwards through the reeds producing a somewhat harsh strident tone.

In the United States reed keyboard instruments were made first in 1818 and generally with exhaust bellows. In this a vacuum is created in the so-called air chamber below the reeds by the exhausting power of the foot pedals, and an air current rushing down from above to fill it passes through the reeds naturally, causing them to "Speak".

James Carhart who took out a patent in 1846 for a single suction or exhaust bellows first applied this system to the melodeon.

Generally there were two pedals, the right for the single bellows and the left for a swell, which started so suddenly as to give a forte effect. The cases resembled a square pianoforte. One of the best instruments was the new organ melodeon made by the George A. Prince Company of Buffalo, one of the pioneer and largest melodeon

1) Mason, H. L., The History and Development of the American Cabinet Organ.

manufacturers. This had two banks of keys, four sets of reeds and one independent pedal set of one and one-half octaves.

This was the general situation of reed organ manufacture before Emmons Hamlin, a gifted mechanic of the Prince Company, discovered the art of voicing reeds by slightly bending or twisting the tongue, about 1850. The revolutionizing results of this discovery are discussed in the contribution of the Mason & Hamlin Company. What information was available about other Boston reed organ manufacturers none of whom are now active is given in Appendix III.

Mason & Hamlin's Contribution

The two partners of this company became acquainted through the Mecca of Boston's musical life in 1854, the Oliver Ditson Store. Lowell Mason had met there Emmons Hamlin from Buffalo and suggested to his son Henry, just returned from his study of music in Europe, that they start business together making reed organs. Mr. Oliver Ditson and Mr. Lowell Mason each loaned them five thousand dollars with which to begin.

Their first product, the Organ-Harmonium, appeared in 1855. It had double bellows operated by two foot blow-pedals in alternation, five octaves and a variety of tonal color through its unique feature, voiced reeds. It became so popular that other manufacturers adopted that name for instruments of entirely different construction. So in 1861 the name Cabinet Organ was introduced and copyrighted by Mason & Hamlin for their practically new instrument which enclosed all the space occupied by it and allowed enlargement of the action.

Other improvements were the automatic bellows swell which was later changed toauniversally used knee swell.

The reed organ was brought to its greatest perfection in the Liszt organ. This had 16, 8, 4 and 2 foot sets of reeds, an aeolian harp set, subbass, octave couplers and a new invention, a pedal point operated by pressing a projection with the knee to retain a note, like sostenuto. All this made it possible to produce tone like the woodwind, brass, string, contra basso and corno of 16' pipe organs. A large library was established of pieces to be played on it and concerts were given to exploit it at 154 Tremont Street where a portion of the second floor had been turned into a concert hall. For a number of years over 1000 Liszt organs a year were shipped to England alone.

By 1880 Mason & Hamlin made cabinet, chapel, Liszt, drawing room models and portable reed organs.

The business continued to grow and prosper so that it was the largest in the United States with one possible exception. About 1880 however western manufacturers, who were able to buy for less and to make instruments more cheaply, cut into the volume of business considerably. Thus in 1882 the first pianos were built. The reed organ gradually became a less and less important part of the business as the public taste for these instruments declined until finally about 1918 or 1919 the manufacture of cabinet organs ceased and any orders received were sent to a highly respected competitor, the Estey Company of Brattleboro, Vermont.

5. Present Day Pipe Organ Builders.

Hook & Hastings Company

This company established in 1827 is the oldest extant firm of pipe organ builders founded in the United States. Elias and George G. Hook began business in Salem, the former having been an apprentice of William Goodrich, and moved to Boston where they earned a high reputation by their work. Francis H. Hastings was engaged by them in 1855 and ten years later became a partner. Later the name was changed to E. & G. G. Hook and Hastings. After the death of George G. Hook in 1880 the company became Hook & Hastings. Mr. Elias Hook died in 1881 and in 1893 the company was incorporated as Hook & Hastings Company. Mr. Hastings died in 1916 and the management passed into the hands of Arthur Coburn, President, Norman Jacobsen, Vice-President and Supervising Designer, Alfred R. Pratt, Secretary and Superintendent, associates of Mr. Hastings for about twenty years. Since Mr. Coburn's death about a year and a half ago Mr. Pratt has been President of the company.

The moving of their business to the present factory at Kendall Green, Massachusetts, was gradual as the first wing was put up in 1885 and the second in 1891.

They have had a New York branch for over sixty years and have other branches located at Philadelphia and Ashville, North Carolina.

This firm has built between 2900 and 3000 church, concert, university and residence organs located in all parts of the United States, "including some of the finest in the country,"[1] and some in

1) Goodrich, Henry A. - Church Organs: Some of the Early Builders in

Canada, one in Mexico, one in Honolulu and a few in Germany. Their first instrument was a parlor organ. This is still in use in a private residence in Brookline, Massachusetts. They have also built a few theatre organs where the concert type of tone was desired. Some of the well known earlier organs built by E. & G. G. Hook were -

The first Tremont Temple organ built in 1853. This was probably the largest and best organ in America at that time. It had 4 manuals, 70 stops and 3096 pipes.[1)]

The second Tremont Temple organ built in 1880 to replace the first which had been burned. This was destroyed by fire in 1893.

The Church of the Immaculate Conception organ built in 1863. It was the largest church organ in the United States at that time, and in 1897 was still considered one of the most effective church organs in Boston. It had 3 manuals, each of 58 notes, a pedal keyboard of 27 keys, 47 speaking registers, 5 pedal stops, 56 stops altogether, and 3381 pipes.[1&2)]

The Mechanics' Hall, Worcester organ was built in 1864. This consisting of Great, Swell, Choir, Solo and Pedal organs was the largest concert organ built in the United States and second only to the Boston Music Hall organ in size.

1) Lahee, Henry C. Organs & Organ Building in New England, New England Magazine, December 1897, pp. 500-502.
2) Dwight's Journal of Music, March 5, 1864, Vol. 23, p. 199.

It had 4 manuals, 73 stops, and 3504 pipes.[1&2)]

The South Congregational Church (Edward Everett Hale's church) organ built in 1864 according to specifications of the organist, B. J. Lang. It was the largest in any Protestant Church, and had Great, Swell, and Choir manuals and Pedale, 38 speaking stops, 7 pedal stops one a Bourbon with 32 foot tone, and 2260 pipes.[3)]

The Shawmut Congregational Church organ, Boston, built in 1866, This had 3 manuals, 51 speaking stops, 12 mechanical stops and 3485 pipes. "Tubular action was first used to a limited extent in this country in this organ."[4)]

The Plymouth Church, Brooklyn, Henry Ward Beecher's church, organ also built in 1866. This had Great, Swell, Choir and Solo manuals each of 58 notes, a pedal keyboard of 30 notes, 65 stops, 3405 pipes, and a pneumatic lever to lighten the touch for the organist. "The grand crescendo may be pronounced to be without exception the greatest improvement ever introduced into the organ." It had another novelty, "the Tuba Mirabilis, which stop is introduced for the first time in this country." "The pipes are voiced somewhat differently from our English Tubas which too much resemble a roaring mad bull." "The Tuba Clarion is its octave."[5)]

1) Lahee, Henry C.- Organs & Organ Building in New England, New England Magazine December 1897, pp. 500-502.
2) Dwight's Journal of Music Nov. 18, 1864 Vol. 24, p.339, & Nov. 26, Vol. 24, p. 348.
3) " " " " Nov. 26, 1864, Vol 24, p. 348
4) Lahee, Henry C.- Same as note 1, but p. 501.
5) Dwight's Journal of Music, April 28, 1866. Vol. 26, pp. 227,228, and May 12, 1866 p. 244.

Both this and the Shawmut Congregational Church organ were still in 1897 considered notable instruments.

The Cincinnati Music Hall organ built in 1880 was considered in 1897 one of the largest and finest organs on this continent. It had 4 manuals, 98 speaking, and 26 mechanical stops, 19 pedal movements, 36 piston combinations, 110 tonal stops and 6237 pipes, or about 1000 more than the Boston Music Hall organ. The largest pipe was 32 feet and the shortest half an inch in length, It also contained carillons, a feature not frequent although contained in several European instruments.[1] It was listed in 1897 as the eighteenth of the 22 largest organs in the world.

Some of their notable modern organs are located as follows-

Boston

Cathedral Church of Saint Paul,

First Church of Christ Scientist (The Mother Church)-4 manuals, 80 feet wide in the interior,

First Parish (Unitarian) Church, West Newton,

New York City

The Riverside Church,

Saint Agnes Roman Catholic Church,

First Church of Christ Scientist,

Third Church of Christ Scientist, Brooklyn - 3 manuals,

1) Lahee, Henry C. Organs & Organ Building in New England, New England Magazine, December 1897. pp. 501.

Other Cities of the United States.

Saint Henry's Roman Catholic Church, Bayonne, New Jersey.

Beneficient Congregational Church, Providence, Rhode Island.

Baptist Temple, Rochester, New York - 86 Feet wide in the interior.

Druid Hills Baptist Church, Atlanta, Georgia.

Hamline Methodist Episcopal Church, Saint Paul, Minnesota.

Scottish Rite Cathedral, Dallas, Texas.

Johnson C. Smith University, Charlotte, North Carolina.

The Riverside Church organ is a good illustration of a modern high grade, large organ. It required over one year to construct this immense instrument at the factory, twenty truckload shipments of the organ parts and about nine months to install. It contains 2900 magnets, 22,000 contacts and the wires, if placed end to end, would extend a distance of 100 miles.

The main organ has 127 speaking stops and is divided into great, small, solo, echo, percussion, and pedal organs. With the exception of the echo organ these are placed in chambers at each side of the chancel. The auxiliary or antiphonal organ is divided into great, swell and pedal sections which are installed in chambers on the triforium floor and at each side of the rear gallery. The echo organ is at the rear of the auditorium in a chamber at an elevation close to the main ceiling from which the tones are reflected.

The console is of the latest mechanical design, giving the organist complete mastery of the registration. The crescendo of the registers is of the selective type. By the use of pistons the

the organist can control the seven stations at will. The solo, echo and precussion organs are "floating" and can be played from any of the four manuals.

The latest type of swell boxes with their patented sound insulators, together with the working of the opening and closing of all folds in the different sections from one master shoe, make possible fine tonal expression through the flexibility in tempo, power and color of tone.

The company's endeavors for quality of workmanship have been aided by the long periods of service of many of their highly skilled workmen. Many past and present employees have been with them for twenty-five, thirty-five, forty or even more years. In some instances the second generation is numbered among their employees.

Hook & Hastings make all parts of their organs except the keys. The scales and gauges used in the gradation of their pipes represent the cumulative experience of over one hundred years. They have special formulae for the composition of the different kinds of metal pipes. For their wooden pipes they use California sugar pine as the best material obtainable.

This company installed their first electric action in an organ in 1895. They were thus among the earliest firms to do this successfully.

Two features of their electric organs they consider of prime importance. One is their magnets with poles made of sofest Norway iron and armatures of the floating type with a special device for regulating. The method of making them has not been changed since

they were developed for their chief repairman never found it necessary to relpace one in twenty years' time.

The other is the use of platinum for the main contacts of their key and coupler actions. This metal is a perfect medium for electricity, is wear-resisting and not affected by heat or atmospheric changes. Its noncorroding quality was well tested when the platinum contacts of an organ damaged by the Dayton, Ohio, flood were found by test to be in perfect condition.

Other special features of their organs are-

The multi-wind chests of the individual vertical valve type with a specially designed dust pocket for each port.

The swell boxes containing a patented sound insulator.

The couplers are controlled by stop-tablets, when few are used, and by toe studs when many are used.

For modern reed tones, including the French horn, English horn, 32 foot Bombarde and others, pocket eschalots and thick weighted tongues are used for better tone quality and for keeping these stops in better tune.

They have patented stops, the French horn patented before 1919 and the flute stop patented February 6, 1924.

George Audsley speaks of the French horn stop as follows-

"Very recently our attention has been directed to a lingual stop, labeled FRENCH HORN, which imitates the voice of the orchestral instrument more closely than any other organ stop known to us. This stop is the production of the Hook & Hastings Company, the esteemed organ

builders of Kendal Green, Massachusetts. This stop differs in construction from any Horn pipe we have seen. While the resonator is of the usual Trumpet form, it is surmounted by a pyramidal cap, soldered on, which is a novelty, so far as our knowledge extends, and which, we can readily understand, exerts a considerable mellowing effect on the tone in conjunction with the slot which admits of adjustment both at bottom and top."[1)]

The flute stop is so constructed that the wind sheet from the tubulator conduit passes across the orifice in the manner employed by the orchestral flute player to reproduce the character of the flute tone.[2)]

Aeolian Skinner Company

This company was established in 1901 by Mr. Ernest M. Skinner, who had been with the George S. Hutchings Company, and was incorporated in 1905, as the Ernest M. Skinner Organ Company. In 1920 the Steere Organ, Company of Springfield, Massachusetts, was taken over. The Aeolian Skinner company has studios at its factory in Dorchester, Massachusetts; New York City; Cleveland, Ohio; San Francisco and Los Angeles, California. The first of 1932 this company purchased and took over the organ interests of the Aeolian Company. The manufacturing of the combined firms is being carried on at the Skinner plant in Dorchester.

1) Audsley, George Ashdown, Organs of the Twentieth Century, Chapter XVI, Forms and Construction of Lingual Pipes p. 466.
2) Hook & Hastings Company, Pipe Organs for Municipal Halls, Memorials, Churches, Theatres, Schools, Lodges, p. 23.

This firm has built church, university, concert and residence organs, and a few theatre organs, none of the last recently however. Residence organs generally have a larger proportion of orchestral colors than church organs, and kettle and snare drums are often used in them to good advantage. A total of about 500 of all types of organs have been built for all parts of the United States and even for Japan and France.

The quality of their instruments is considered of the highest, if not the highest in the United States, and compares favorably with the best built abroad.

The house organs are made both with and withour players, in which rolls are used, and vary from six or seven to about fifty stops, as in the New York studio organ. At the present time they have a Program Player, a circular holder by which up to ten records can be played successively.

An interesting development of automatic organ playing is the "Orchestrator" invented by Mr. Skinner about 1916. By reducing the size of the holes, the whole organ range of sixty-two notes could be perforated on the player rolls. These tracker holes were staggered to form different sets. This permitted division of the tracker board into six sections allowing six solo voices to be played at once.

Five of these sections were of three octaves each, about the compass of the orchestral instruments such as flute, oboe, clarinet, bassoon, French horn, trombone and one section had a compass of 5 octaves. The octave playing was controlled through pilot holes

of which there were three to a section. One of the three octave sections was a pedal section.

There were also thirteen separate swell boxes opened from the tracker board for the different orchestral stops, and harp and piano.

This invention could be used in an organ of two manuals or larger provided it contained sufficient variety of orchestral stops. It produced beautiful color effects through combinations of different instrumental tone qualities.

Only a few of these were made before the World War when production was stopped. One Orchestrator was placed in the home of Mr. Lamborne of Montclair, New Jersey, and another in the home of Mr. Arthur Curtis James of New York City.

The idea of the Orchestrator is used today in this company's player rolls, but in the keyboard idion of chords instead of the orchestral idiom, and a maximum of three voices can be played at once. Three sections play five octaves and the pedal section plays three octaves.

Some of their most noted organs are located as follows-

In Churches

New York City

Fifth Avenue Presbyterian Church

Grace Church

Saint Thomas' Church - ninety stops, great, swell, choir, solo, echo, and pedal organs.

Cathedral of Saint John the Divine - four manuals

Saint Bartholomew's Church - five manuals, one hundred and forty stops, the largest church organ in New York City.[1)]

Hartford, Connecticut - Christ Church

Chicago, Illinois - Fourth Presbyterian

In universities, generally with four manuals and ninety to one hundred stops.

City College, New York City

Williams College

Harvard

Princeton

Michigan

Virginia

University of California at Los Angeles

In halls and theatres

Capitol Theatre, New York City

Severance Hall, Cleveland, eighty seven stops, orchestral type of organ to play with the Cleveland symphony orchestra.

Cleveland Municipal Hall - five manuals, one hundred and forty to one hundred and fifty stops, the largest one built.

1) When Saint Bartholomew's Church moved uptown, this new organ was installed about 1917.

As. Mr. Skinner is a voicer, fine mechanic, and inventor this company has contributed much to the development of modern organs in the way of improvements and patented inventions. Among these are the following -

The Pitman wind chest, invented about thirty five years ago.[1] This makes the stop action instantaneous. It is used by most of the principal builders in the United States, England, Germany and France, as it gives precision in changing from one tone color to another, is reliable, less expensive and more comfortable to build.

Extremely rapid pneumatic key action tested to a speed of a 240th of a second, extensively copied.

Electro pneumatic mechanism for keys, stops, combinations.

Patents-Electro pneumatic crescendo pedal-thirty-two years ago.
Electro pneumatic swell engine pedal-twenty years ago.[2]
Ability to play a stop from two manuals- thirty years ago.

All the orchestral colors except violin have been produced in one or more of their organs. In general only the clarinet, oboe, and strings had been produced before, and that was in England. "The Contemporary American Organ" precedes a list of stops invented by Mr. Skinner and the organs in which they were used with this statement.- "It would be incomplete to close the chapter on the sound-producing portion of the organ without some references to the contribution of several American builders and Mr. Ernest M. Skinner in particular, to the tone of the American Organ. Many American organ

1) For a discussion of this invention, see Barnes, William Harrison - Contemporary American Organ, pp. 272&273
2) Ibid. p. 117, Whiffle-tree motor.

builders have made improvements and discoveries in organ tone but probably none of them has been more interested nor has done as much along these lines as Mr. Skinner."[1]

"Register[2] - First Organ in Which Used.

Erzahler - Christ Church, Hartford

Orchestral oboe (8' and 16') City College, New York City

Kleine Erzahler - Fourth Presbyterian, Chicago

Gross Gedeckt - Second Congregational, Holyoke, Massachusetts

Corno di Bassetto - Williams College

Tuba Mirabilis - Cathedral of Saint John the Divine

French Trumpet - " " " " " "

Orchestral Bassoon (16') Skinner Studio

Gamba Celeste-Cathedral of Saint John the Divine

Bombarde (32') City College, New York City

Violone (32') Cathedral of Saint John the Divine

Sub Bass (32') Saint Thomas, New York City

Contra Bassoon (32') Princeton University."[3]

Frazee Organ Company

The founder of the company was born in 1870 in New Brunswick, Canada, where as a lad of fourteen he began working for the Peters Organ Company of Saint John. While there he helped to manufacture the first electric action organ in Canada. In 1894 he entered the employ of the Boston firm of Jesse Woodberry, when he was starting to build his first electric action organ. When Mr. Woodberry retired from business in 1910 Leslee H. Frazee, E. E. Smallman, Mr. Woodbury's

1) Barnes, etc. Contributions to the Tone of the American Organ, p.71.
2) Registers are all eight feet unless otherwise noted.
3) Barnes, William H. The Contemporary American Organ, Sound Producing Portions, p.73.

foreman, and Henry D. Kimball of the Hutching's Organ Company formed a company under the name of Kimball, Smallman and Frazee. Upon Mr. Smallman's retirement in 1915 the firm name was changed to the Kimball-Frazee Organ Company. At the time of Mr. Kimball's death in 1920 Mr. Frazee's son, H. Norman Frazee, joined the business and the name was changed to the Frazee Organ Company. Thus this company is a successor to the Jesse Woodbury Company. It is located in Everett, Massachusetts.

This company has built church, school and college, concert and residence organs about one hundred and thirty five altogether in all parts of the United States, the majority being located in Massachusetts.

It has been a leader in developing small two manual inexpensive organs costing between $7000 and $8000, which the company's low overhaad enables them to make with an interesting combination of organ stops. So it has built many school organs, as at Dana Hall School, Wellesley, Mount Berry School, Georgia, Phillips Academy Chapel, Andover, Massachusetts all three manual; Stony Brook School, ~~and~~ Stony Brook Long Island, and Saint Anselm's College, Manchester, Vermont, two manuals.

Some of their notable organs are as follows -

Park Street Church, Boston - three manuals.

Temple Mishkan, Tefela, Boston, four manuals.

First Congregational, Lowell, Massachusetts, four manuals.

Harvard Club - four manuals, sixty-seven stops (non-borrowed). This was an outstanding concert organ when it was put in and the only strictly concert one about Boston.

Residence - Mr. Ernest B. Dane, Brookline, Massachusetts, four manuals, eighty-six stops. This is one of the largest private organs in the United States today.

C ORCHESTRAL A D BAND INSTRUMENTS

In the census of 1860 there were 53 establishments listed as making miscellaneous musical instruments with an annual production value of $315,800. Massachusetts had six of these setablishments making instruments worth about $60,800 a year. In 1927 some 99 establishments were listed with a total annual production value of $15,311,110. Of these Massachusetts had some eight establishments with products valued at $788,340.

Boston has not been noted for quantity manufacture of band and orchestral instruments, but the quality of some of its products in these lines has made a reputation for them.

One early instrument maker was Samuel Blythe (1744-1795), who made harpsichords and most kinds of stringed instruments.[1] His shop was on Summer Street, Salem in 1784.

Another maker was Benjamin Crehore. He had a shop in Milton about 1800 in which he made violins, violoncellos, guitars, drums, flutes, and pianofortes.[2 & 3] In the matter of credit he was helped by Lewis Vose, a relative of the founder of Vose & Sons Piano Company. At least one of Crehore's violoncellos is still in use, having been repaired by the firm of Weeman, Beal and Holmberg.

Whatever information the writer has been able to collect, mainly from the personal knowledge of persons interviewed, about former makers

1) Belknap, Henry W., Artists and Craftsmen of Essex County, Salem, Massachusetts, p.29
2) American History and Encyclopedia of Music, p.317
3) For information about his pianofortes see p.63

of instruments other than pianofortes and organs is listed in Appendix IV.

At the present time Boston is a centre of high grade violin, and flute, piccolo and clarinet making. Other kinds of band and orchestral instruments and accessories are made by one or two firms only. The different concerns and their contributions are discussed under three headings -- violin makers; flute, piccolo and clarinet makers; and miscellaneous band, orchestral and other instruments.

1. Violin Makers

Despite the fact that music except hymn singing was disapproved by the Puritans "Massachusetts apart from the Hub may be credited with having produced the first violins made in the country."[1] The earliest New England made violin known to Mr. John A. Gould, who has made a study of early makers, is dated 1776 and was made in Worcester. The first Boston makers of good violins were the White Brothers, Asa Warren and Ira Johnson, one of whose violins dated 1835 is now in the possession of Mr. Gould. Violins made previous to theirs were amateurish instruments.

Both Whites were fine workmen, but the elder brother, Ira J., seems to have been considered the superior of the two. He was also the first Boston maker of wound violin strings. His machine, the first made in Boston for that purpose, is now in the possession of Mr. John A. Gould.[2]

Asa Warren White made several hundred violins, and his shop was a training school for some of the later violin makers. The following story is related of him --

A short rotund man brought into his shop one day an instrument which he claimed was a Stradivarius. Mr. White, a tall, genteel-looking man, examined it carefully and said he was not interested as it was not a genuine one. The man thereupon swore roundly and vociferously at him, reasserting the authenticity. Mr. White simply stamped his foot and exclaimed "You're an ass!"[3]

1) Spillane, Daniel -- History of the American Pianoforte, p.47
2) Statements of Mr. John A. Gould.
3) Told by Mr. Treffle Gervais.

Probably the first really noted violin maker in Boston was George Gemunder who came here in 1847 from Württemberg, Germany. Violins made during his Boston residence at 357 Washington Street won medals at the London World's Fair held in 1851. He was especially successful in his models, finish and varnishing and his instruments have often been mistaken for Cremonas. One of the most valuable discoveries made by him was how to acquire results with natural woods not chemically treated.[1] After a few years in Boston he went to New York.

Inexpensive stringed instruments for the orchestra can be made in Europe and imported, despite a high duty, for about the cost of the raw materials in the United States. Consequently, Boston violin houses generally do not make instruments retailing for less than $150.[2] These statements seem to be borne out by the fact that the census for 1900 reported only 1503 manufactured that year in the entire United States and also by the fact that just one firm in the whole country makes inexpensive violins on a quantity production basis.

There seem to be three chief centres for making violins of the art type in the United States -- New York, Chicago, and Boston. "Die Geigen und Lautenmacher" published in 1904 listed 21 makers in New York, 14 in Chicago, and 14 in Boston. Alberto Bachman's "Encyclopaedia of the Violin" published in 1925 listed 74 American violin makers located in all parts of the United States. The three main centres of

2) Statements of Mr. Henry F. Schultz, violin maker.
1) American History and Encyclopaedia p. 334.

this industry were New York with 13 establishments, Chicago with 10, and Boston with 9. Judging by Boston shops listed these firms were makers of the handicraft art type of instrument, who generally had small shops with a few highly skilled workers. Most of the present Boston firms discussed are known internationally as is shown by their being listed in one or more dictionaries of violin makers published in Europe. Their contributions are given under the individual firms. Former makers are discussed Appendix IV.

In addition to master makers, there have also been experimenters who have tried to improve the violin. Such things as filling a glass-backed violin with smoke or sand and playing on it to see the effect of different notes, boring and filling small gimlet holes to try to give the effect of an old worm-eaten violin of good tone, have been done.

E. Berliner patented a tail piece which had the bridge mounted on it and holes and plugs for the strings like a guitar. He was not a violin maker as he had his models made by Maurice White, an expert maker, according to his designs. He had a wonderful inventive genius, nevertheless, for it was he who invented and sold to the Victor Co. the phonograph disk. He also had the original of the familiar picture,"His Master's Voice", painted in Europe.[1)]

1) Statements of Mr. A. J. Oettinger.

Weeman, Beal & Holmberg[1)]

This firm, established by Orin Weeman in 1872, is the oldest and one of the largest violin houses now in Boston. In April 1910 it became Weeman, Beal & Holmberg and is to be found at 564 Washington Street. This house is devoted exclusively to the manufacture, import, sale at wholesale and retail of violins, violas and violoncellos, and accessories such as bows, strings, etc., and repair of these instruments. It makes a point of carrying everything required by them. The instruments carried for sale are mainly for artist and professional use and some less expensive ones for school use.

Repairing of all styles of instruments, whether modern, early New England make or old masters, constitutes a large part of this company's business, keeping several men busy all the time.

Their own instruments have all been custom made to order, the violins being made mostly by Mr. Weeman and violoncellos by Mr. Beal, generally with maple back and spruce top. The quality of the spruce and proper amount of graduation for resistance is tested by hand. They have experimented with different arches (swells) but have gone back to that used by Stradivarius. Flamewood has also been used by them. One beautiful instrument was made of this in 1901 for Charles W. Allen.

Although it is difficult to obtain instruments made by the noted European masters, this house has imported and sold an Amati

1) Orin Weeman is listed in the German encyclopedia, "Die Geigen und Lautenmacher", p.701

violin now in Cambridge, Massachusetts, an Amati violoncello now in Boston, a Joseph Guarnerius violin in Jackson, Michigan, and a Petrus Guarnerius in New York City.

Jacob Thoma & Son[1)]

This business was established by Jacob Thoma in 1880 and is now carried on by his son, Alexander, at 100 Boylston Street.

They are importers and violin makers, dealers in high-grade violins, violoncellos, bows, cases, strings and specialties, and repair violins and bows. They also appraise instruments.

In making their violins and violas which are of selected old tonewood Stradivarius and Guarnerius are used as models. Their own make of violins is used largely by violin teachers.

They wind strings for violins and violas, making a specialty of the silver "G" and aluminum "D" strings.

John A. Gould & Sons[2)]

Mr. John A. Gould was born at Windermere, England, in 1860, and was apprenticed to a pianoforte manufacturer at the age of 13. He learned his trade, but wanted to make violins which he studied in shop windows, making his first at the age of 16. Two years later he worked with Mr. F. Archer, until he settled with a brother-in-law in Ontario in 1882. At the Hamilton Industrial Exposition in 1884 he was granted the first diploma ever awarded in Canada for violin making. This can now be seen hanging on the wall of his shop at 230 Boylston Street.

1) Listed in Bachmann, Alberto A. -- An Encyclopedia of the Violin, p.54
2) Listed in Willibald, Leo -- Die Geigen und Lautenmacher, p.232

There was not enough business for a violin maker in Hamilton and Toronto so Mr. Gould came to Boston in 1885 and worked for Orin Weeman for whom his second son is named. Two or three years later he went home to England, returning in 1889 to open his first shop at the corner of West and Tremont Streets. In 1890 he moved to 43 West Street, where he stayed for thirty years until he moved to his present location. His sons, Erik and Orin, are with him in the business.

This firm imports violins from the chief European commercial centres, Markneukirchen, Mittenwald, Germany, Mirecourt, France and Schonbach, Czecho-Slovakia, selling at wholesale and retail. They supplied the first fiddles for the Quincy and Winchester schools eighteen years ago when they started instrumental instruction.

They also make high-grade violins, violas and violoncellos, largely in Rome, Maine, in the summer, following their own patterns since 1905, as Mr. Gould, who has handled violins made by all the old masters, believes just as good violins are made today. Their pattern has points of resemblance to that of Petrus Guarnerius. In his article, "Facts About Old Violins", he brings out that instruments by the same great master varied in quality and tone and that the tone of any of these instruments which have been repaired is really due to the work of the modern repairer who strengthens thin places, etc. Bows, strings, polishes, rosin and varnish are also made by them. The standing of their instruments is shown by the following statements: "Gould's instruments are well spoken of by those qualified to judge them"[1] -- "His reputation as a maker

1) Bachman, Alberto - An Encyclopedia of the Violin, p.54

and repairer extends through the whole of Northern America".[1)]

The largest part of their business is restoration. They have had such customers as Miss Marjorie Possell, Mrs. Ellery, the Kneisels and Fritz Kreisler. Most famous concert violinists known in Boston have had their instruments adjusted at some time by Mr. Gould.

"What is said to have been the largest single repair job in the history of the fiddle"[2)] was done by them shortly after the war when the Lindsey Memorial collection of musical instruments was stored next to the ship's boiler in transit across the Atlantic to the Boston Museum of Fine Arts. The stringed instruments, some two hundred violins, violas, violoncellos, harps, were turned over to them for restoration. It took nine months' work by Mr. Gould and his four sons to accomplish this.

This firm also does appraising and not long ago it appraised the stringed instruments of the Searles Estate.

Mr. Gould in his forty years of work in Boston has made a study of old New England violin makers. In the course of this he has collected early New England fiddles, hundreds of labels of ancient makers, pictures of famous old violins, business cards of the members of his profession, and has written a history of New England's violin makers from this material.

Through Mr. Erik Gould, who is a collector of violins, Boston is now the home of the violin which belonged to Robert Burns, the

1) Poidras, Henri -- Critical and Documentary Dictionary of Violin Makers Old and Modern, p.189
2) Boston Herald, Jan. 3, 1931, p.12 -- "Boston Personalities" Column.

Scotch bard. He bought it from a Mrs. Hill of Enfield, England, whose husband was a direct descendant of the poet.

The name of the maker, "A. Hardie, Maxwelton, 1758", is stamped on the inside of the instrument. The top piece is Scotch fir and the strings are attached to boxwood instead of the customary rose or ebony pegs. The tailpiece is fastened to the body of the instrument by means of two catgut strings looped through holes in this part.[1)]

Henry F. Schultz[2)]

Mr. Schultz was born in Cambridge and learned his trade of violin and double bass making in Chicago and Boston. He worked for Elias Howe, Musicians' Supply Company and Oliver Ditson, having charge of the repairing while with these firms. He also worked for Clark Powers in the 1880's and Charles W. Story, for whom he made many instruments in his shop at Randolph, Massachusetts. He started his own business in 1898 in Scollay Square, remaining there until the building burned in 1910. Then he worked at his Randolph shop and in 1922 took a place at 775 Washington Street.

Mr. Schultz has made for himself many violins, violas, violoncellos and double basses, being almost the only maker of the last-named in Massachusetts. He uses spruce and maple wood for the body and ebony for pegs, fingerboard and tail, following Stradivarius and Guarnerius as patterns. Some of his instruments are now used by the New York Philharmonic Orchestra players.

1) Boston Traveler, Jan. 31, 1931, p.16, "Boston Personalities" column.
2) Listed in Bachmann, Alberto -- Encyclopedia of the Violin, p.54

He also imports and sells high-grade new instruments, occasionally some older ones, bows and all kinds of trimmings.

As an appraiser, Mr. Schultz has been called to testify in Boston courts, especially the custom house court in duty cases.

Repairing is one of the most important parts of the business. He has had double basses sent to him from New York for restoration as there are few American workers skilled in this. He has also done the feat of repairing badly broken violins, one of which had been smashed into 96 pieces and the other into 427 pieces.

Edmund F. Bryant[1)]

Mr. Bryant was born at Woodstock, New Hampshire. He made his first violin as a boy and played it at husking bees about there. When he was thirteen years old, he went to Lowell, Massachusetts, to study violin with Oscar Greiner, the concert master of the Germania Orchestra. Later, he studied with Julius Eichberg and Bernhardt Listemann at the old Boston Conservatory of Music of which he is a graduate.

At the age of seventeen, he played in a Lowell theatre orchestra and then went on the road with different companies, such as "Birds of a Feather" and the Swedish "Alle Archestram Drama". After that he settled in Boston as a teacher and player of violin and also had a class in Lowell, Massachusetts.

The art of violin making he learned through working with Ira J. White, the best maker in Boston at that time. His start in

1) Listed in Poidras, Henri - Critical and Documentary Dictionary of Violin Makers Old and Modern, p.181 as a contemporary maker.

business for himself at 165 Tremont Street began with the sale for his friend, Mr. Hathorn, of his collection of sixty old violins. Mr. Bryant uses Stradivarius, Guarnerius and Amati as patterns for his instruments, all of which have been made to order. In all since 1900 he has made 74 violins, 2 or 3 violas and 2 violoncellos. The larger part of his business is repairing and reconstructing these kinds of stringed instruments.

J. H. Edler

Mr. Edler comes of a family of violin makers, for his grandfather, Friedrich Christian Edler, started in that business in 1850 in Frankfurt-am-Main, Germany. His father, also F. Ch., continued it and he and his brothers worked there, one of them still carrying it on. To gain wider experience he worked a year in Zurich, Switzerland, and then came to New York in 1898. There he worked for John Friederich until he came to Boston.

He started in business for himself here in 1900 and made some ten or eleven violins and two violoncellos patterned after Stradivarius and Guarnerius. Of late years his business has consisted mostly of repairing, appraising and dealing in old violins, violas and violoncellos, which he has sold to customers in many parts of the United States. He also imports and sells new instruments and trimmings at 611 Washington Street.

Treffle Gervais

Mr. Gervais was born November 2, 1863 in Canada of French parents who moved to Boston in 1877. He made his first violin of wood he bought from a lumber yard, because he was fond of music and could not afford to buy one. His fifth instrument interested Elias Howe so that he worked for him in 1885 and 1886. He also worked for Asa Warren White, making violins and bows, a year for Orin Weeman and two years for J. B. Squier.

Since about 1900 he has conducted his own shop, which is now at 170A Tremont Street, and "derives a well earned reputation from his much esteemed works".[1] During this time he has made thirty-seven violins, two violas and one violoncello all to order. He has followed a Guarnerius model almost exclusively because of the beauty of its well rounded lines. The label used in his instruments is reproduced on plate XXII and one of his violins on plate XXV in Bachmann's Encyclopedia of the Violin.[2]

Musicians' Supply Company

This company was organized in 1905 by Mr. A. J. Oettinger and is located at 177 Tremont Street. It supplies raw materials for all kinds of bow stringed instruments to makers located all over the United States and in many foreign countries, such as Honolulu, South Africa, South America and the Walker Group of Islands.

The business also includes importing, selling and appraising old violins, violas and violoncellos, repairing all kinds of bow

1) Poidras, Henri - Critical and Documentary Dictionary of Violin Makers Old and Modern, p.188 & 9.
2) Bachmann, Alberto -- An Encyclopedia of the Violin, p.54.

stringed instruments except double basses and selling modern violins, bows, trimmings and other kinds of orchestral and band instruments.

From its start the company has had expert violin makers making instruments to order as well as repairing them. For the last five years Guiseppi Martino, an Italian, who had his own shop previously, has been with the company as violin maker and repairer.

O. H. Bryant & Son

Mr. Oliver H. Bryant who has made violins for forty-three years, started his own business as dealer, maker, appraiser and expert in 1910. His present address is 240 Huntington Avenue.

This firm's main business is as dealers and appraisers. As dealers they sold a Stradivarius to a Boston collector for $20,000 and another Stradivarius to a Los Angeles man for $35,000. They carry a full line of accessories.

Mr. S. Koussevitsky's Amati Bass has been one of the many instruments repaired by them. Their manufacturing is to order. To date they had made 162 violins, 3 violas and two violoncellos and many bows. It generally takes two months to make an instrument including the varnishing for which tempered amber oil is used. The woods are maple and spruce. Allard Stradivarius is followed as a pattern and the height and arching of the plates is varied according as power or quality is desired, depending on whether the instrument is for symphonic or home use. These have been played

mostly by artists and professionals in all parts of the United States. A partial list of users is as follows:

Efrem Zimbalist

Fritz Kreisler, personal use

Isaye, on short tours

Felix Winternitz, Boston and New York

Eleus, Boston

Ellen Langley, New York and Philadelphia

Valedimar Berlin, ~~and~~ Philadelphia

Frederick Fradkin, New York

Morris Hewett, Head of Cleveland Institute of Music

Sylvan Roach, Concert Master Los Angeles Symphony Orchestra

New England Conservatory teachers

Leo F. Reisman, Hotel Brunswick, Boston

P. Balzerson[1)]

Mr. Peter Balzerson was born in Tjotta, Norway, came to Boston when 30 years old and was a building trade worker until the World War. He made his first fiddle about 36 years ago and continued fiddle making as a hobby. He worked for Mr. O. H. Bryant and started in business for himself in 1920 after visiting many European shops.

He uses the Stradivarius, J. B. Guadagnini, Nicolas Amati and Joseph Guarnerius as patterns for his instruments. In all he has made 168 violins, 6 violas and two violoncellos. He also makes bows, repairs, and sells old makes of instruments.

1) Listed in Poidras, Henri -- Critical and Documentary Dictionary of Violin Makers, Old and Modern, p. 178 as a contemporary maker.

C. F. Stanley

The Stanley family's interest in violins dates back to the time when Mr. C. F. Stanley's great grandfather in Dixfield, Maine, gave his son Isaac a double bass and a violin. The latter taught himself to play on them. His son, Mr. F. O. Stanley, made a three-quarter size violin when ten years old, and learned to play somewhat on it. When he was sixteen years old he made two full size instruments. He used State of Maine pine for the front, obtaining the idea for this from Longfellow's "Tales of a Wayside Inn," not knowing that the pine referred to there was Swiss pine, the European name for spruce. Ever since then he has made and experimented with violins as a hobby, selling some in the 1870's, when he was a high school teacher.

In 1907 Mr. F. O. Stanley and his nephew, who had worked with him, fitted up a shop at 337 Waverley Avenue, Newton, Massachusetts. There the latter has made just under four hundred violins, all patterned after one of Stradivarius' best instruments which is in a museum at Florence, Italy, and two violins for one customer patterned after Guadagnini.

Their idea is to make as good an instrument as can be made for the money to sell at a reasonable price. For the fronts they use both American and European spruce and European maple for the rest of the body. Their customers are mostly violin teachers and advanced students located in many different parts of the United States. They made two specially fine violins for Henry Ford who became interested because some players at the Wayside Inn used Stanley instruments.

Allen and Ganshirt, Inc.

This company, located at 46 LaGrange Street, was organized in May 1931 by John M. Allen and William Ganshirt, who had both been with the Oliver Ditson Company.

The business consists of the sale of musical instruments, band & orchestra supplies at wholesale and retail, and instrument and radio repairing.

Mr. Ganshirt has worked as violin repairer for other concerns and has made some 25 violins using Stradivarius and Guarnerius as his patterns.

Richard H. Turner

Mr. Turner is a musician who came from Maine to Boston twelve years ago. He has worked here as expert violin repairer for the Musicians' Supply Company and Elias Howe. In February 1932 he started in business for himself at 2 Park Square.

He has made violins since he was a boy, using Amati, Stradivarius and Guarnerius models for patterns, and three or four violas. He is also a violin player and gained his knowledge of the acoustics of the violin from his teachers. Because he never could find a bow which was satisfactory to himself for playing, he began experimenting with them in 1907 with the result that bow making has become a specialty of his. He has also made a study of kinds of bridges suitable for different styles of violins.

Raoul Rettberg [1]

Mr. Rettberg is an expert bow maker of many years standing and a maker and repairer of violins. He also knows the ancient stringed instruments as he has made at least one viole d'amour. His present location is 250 Huntington Avenue.

1) Listed in Poidras, Henri - Critical and Documentary Dictionary of Violin Makers Old and Modern, p. 202 as a contemporary bow maker.

2. Flute, Piccolo and Clarinet Makers

"The first mention of the importation of flageolets, hautboys (oboes) and other instruments" into this country was in 1716.[1] They were imported by Edward Enstone, organist of King's Chapel, Boston.

Probably the first flutes manufactured in Boston were made by the firm of Walter Crosby which was in business from 1836-1874. Schauffler and Lenkhardt in the 1850's, Hüttl and Fischer in the 1870's and Agust Damm were other early Boston makers. The last named made a flute producing a good tone quality but none of them gave Boston any unusual reputation as a flute making centre.

Now, Boston is the centre of high grade flute making. This is due largely to the work of Messrs. William S. and George W. Haynes who came here from Providence in 1887. "He (the first named) is the most prominent maker in this country at the present time, and I think it is correct to say that he is perhaps the most eminent flute maker in the world. I would make only one possible exception to this statement; that relates to a London maker, but the London makers are apparently losing in standing, while Haynes has been gaining. There are at the present time some other very fine flute makers in Boston also."[2]

Wm. S. Haynes Co.

Mr. William S. Haynes and his brother, George W., made their first flutes as boys after study of a flute loaned them by the flutist of the Boston Symphony Orchestra when it came to Providence.

1) Lahee, Henry C. Annals of Music in America p. 3
2) Statement of Dr. Dayton C. Miller, Case School of Applied Science, Cleveland, Ohio, owner of the D. C. Miller Collection of Flutes.

It took them about a year to make this instrument which did not work too well at first. After making others they were encouraged to come to Boston to repair flutes as there were few good workmen in this line.

Mr. George Haynes started a repair shop here in 1888 and then sent for his brother, William. The former became ill and went to California for his health, but William Haynes kept on. He made the flutes for the John C. Haynes Company while it was in existence, and succeeded in interesting Mr. Carl Wehner of the Metropolitan Opera Company Orchestra in a flute, especially made for him, enough to play it at a performance of the Opera Company in Boston, as his French flute had deteriorated with use. Mr. Wehner afterwards bought this instrument for one hundred dollars and interested six friends to buy Haynes flutes. Since he was the greatest flutist of that time, the success of the business, now located at 108 Massachusetts Avenue, was then assured.

He used African blackwood in his instruments and guaranteed them for a year against cracking. Despite the fact that this wood is so hard that it ruins saws and makes it difficult to bore the parabola curve in the head joint, it got out of shape or cracked in this climate after being moistened by saliva, and affected the intonation and scale unless it were swabbed out.

So after considerable experimentation to get the right bore for the hole, Mr. Haynes produced about 1922 an all sterling silver flute to eliminate these difficulties. He then had to persuade flute players that an all metal instrument could produce the same wood-wind tone as the wooden flute. Mr. Charles K. North and Mr. Paul

Fox of the Boston Symphony Orchestra made the first comparative tests for this purpose. Gradually this new feature was accepted until now few wooden flutes are made for professional use by any manufacturers. The Wm. S. Haynes Company, incorporated in 1912, makes now silver and 14 kt. pure gold Boehm flutes ranging in price from $148. for a silver student model to $1100. for gold. This softer metal produces a more perfect tone.

The Alto flute in G, a comparatively rare instrument is also made by the company in sterling silver. The French model flute with open holes used by French players is becoming an increasingly popular model.

Recently a student's flute has been brought out for school use. They also are made of sterling silver but are less expensive because special tools were developed so that some parts could be made by machinery instead of by hand as in the case of the regular products.

Boehm piccolos were also made by the Wm. S. Haynes Co. practically from its inception. Since about 1923 the wooden piccolo has been gradually superseded by metal piccolos till about 95% of the piccolos of this concern are made of sterling silver. Until about five years ago their piccolos were made with a cylindrical bore. Since that time they have been making also conical bore C and D^b piccolos with extremely thick tube which does not fade out on the lower notes and is freer and easier blowing in the third register making a more perfect scale and intonation. Both cylindrical and conical bore instruments are made to order in 14 kt. gold. Between forty-five and sixty flutes and piccolos are produced monthly in

normal times and a total of twelve thousand of both, mostly flutes, have been made to date.

For over four years now the Wm. S. Haynes Co. has made a new Boehm clarinet consisting of two hard-drawn sterling silver seamless tubes, one within the other. Between the cylinders is an air chamber tightly sealed by a cap at each end. By breathing through this when both caps have been removed and then quickly capping both openings, the instrument is rendered thermos and stays warm through an entire performance. This makes a better scale and intonation. Nearly three hundred of these self-advertised clarinets have been sold, many being in the hands of the finest artists such as

- Two Washington Marine Band Solo Players
  All the Metropolitan Orchestra clarinet players
  The first clarinet of the San Francisco Symphony Orchestra
  Van Amburgh of the Barrére Little Symphony of New York

Besides being a pioneer in metal flute making Mr. Wm. S. Haynes invented the drawn tone holes from the tube used on the silver instruments as the supporting wall on which the keys rest.

Many flute clubs all over the United States use the Wm. S. Haynes flute. Some of the artists using these instruments are George Barrére, first great professional player to use a Wm. S. Haynes gold flute exclusively, and

Georges Laurent,	First flutist Boston Symphony Orchestra and conductor and manager of Boston Flute Players' Club.
Henry Woempner	First Flute, Minnesota Symphony
Julius Furman,	First Flute, Los Angeles Symphony

Anthony Linden,	Solo Flute, San Francisco Symphony
Domenico Iascone,	First Flute, Symphony Orchestra, Washington D. C.
Clayton Lindsay,	Solo Flute, Washington Marine Band
Walter Whitaker,	First Flute, D'Oyly Carte Opera Co., and teacher Conservatory of Music, Toronto, Canada.
Fortunate Covone,	Gold flute user, First Flute, Chicago Opera.
Daniel Maquarre,	First Flute, Monte Carlo Casino, Monaco
George Roscoe Possell,	Soloist for Madame Galli Curci
Luisa Tetrazzini,	wrote "Gentlemen,-Your flute is an inspiration to my voice, and I wish to congratulate you for the production of such a beautiful toned instrument."

The Haynes-Schwelm Co.

This company was started in Roslindale in 1913 with Mr. Wm. S. Haynes, Jr. as manager. They build custom made brass, German silver, sterling silver and gold flutes to order, American models with covered keys, French models with open keys, alto sterling silver flutes with covered keys, and wooden and sterling silver piccolos. Their serial numbers for flutes and piccolos are now in the forty-one hundreds. They also carry accessories and make repairs.

This firm finds that about three quarters of its piccolo player customers still prefer the wooden instrument, because it is so difficult to duplicate the same body of tone in an instrument of so small a bore with a thin metal wall in place of a thick wooden wall.

About five years ago this firm took over a half interest in the Pruefer Manufacturing Co. of Providence. This firm had been

making commercial clarinets. They have gradually been changed into professional quality instruments, made of metal instead of wood. German silver is used in preference to sterling silver as it gives more resonance, or gold. These have two walls with the thermos air chamber between and the tone holes are soldered on to the tube as experiments have shown this to be the best way to retain the hardness and resonant tone.[1] Lead, tin, and gold are used for solder. In the case of the last, hard running solder is used first and then soft running. About 6000 clarinets have been made in the five years that the Haynes-Schwelm Company has been interested in their production.

Instruments made by this concern are used by teachers of flute playing and artists like John Fisher, Wm. E. Hollinger and Charles K. North, who was with the Boston Symphony Orchestra, the Boston Band, Boston Opera, and was flute soloist with Dame Melba.

Verne Q. Powell

Mr. Powell was a jeweller at Fort Scott, Kansas, and a flute player on the side. His first flute, made of the silver assets of a defunct bank, came into the hands of a Boston flute making concern which asked him to work for them. So he came to Boston about twenty years ago.

He has played the flute professionally for thirteen years and the piccolo for eleven years and was the first professional flutist in the Kansas City Symphony. Later he was in Philadelphia. In Boston he is first flutist for the People's Symphony Orchestra.

1) Statesments of Mr. Wm. S. Haynes, Jr.

He also teaches flute playing.

Since 1927 he has been in business for himself, his present address being 295 Huntington Avenue, and is perfecting the scale and bore to meet with his ideas of a flute player's needs. In this time he has built one hundred and sixty-nine hand made silver and gold instruments, mostly flutes.

The high standing of his instruments is shown by his users who include—

Boston Symphony, three players
Detroit Symphony, first flutist--gold flute
" " , second " --silver flute
New York Philharmonic Symphony, 2 flutes and 1 piccolo
Philadelphia Symphony, 2 flutes
Cleveland Symphony, 2 flutes and 1 piccolo

The Cundy-Bettoney Co.

Mr. Harry Bettoney came from England to Boston in 1893 and got a job in the orchestra at the old Park Theatre playing the clarinet. In 1897 he went into business with W. H. Cundy, a music engraver and publisher who had started in Boston in 1855. In 1900 he started for himself at 48 Hanover Street and imported clarinets and woodwinds and introduced into the United States the Buffet Clarinet[1] made in Paris by Crampon. After three or four years he bought out Mr. Cundy. Soon after 1900 he also bought out E. H. Wurlitzer, an instrument maker and repairer. One year later he began to make flutes and piccolos

1) Whitmore & Boris of 178 Washington Street in business only a few years, imported the very first just two weeks ahead of Mr. Bettoney.

while continuing to import clarinets. His place soon became a service station for New England for repairing all kinds of woodwind instruments. The making of clarinets of which this company is now a leading manufacturer, was begun in 1912. The factory is located in Jamaica Plain.

In 1919 the Cundy-Bettoney Co. bought out the Boston Musical Instrument Company, the oldest manufacturer of brass instruments in the country, established in 1841 and incorporated January 1, 1913. They were known for over three generations for their high grade "Boston Three Star Trumpet." They also made good baritones and basses. The Cundy-Bettoney Company still makes some of these cornets and trumpets, which had no real competitors until 1915.[1] Some noted Boston players who have used these trumpets and cornets are Edward (Ned) Kendall with his keyed bugle, Mathew Arbuckle with his Bayley model cornet and Henry C. Brown, the two best cornet players of that in Boston,[2] Walter Emerson, Jack Hammond, John Flockton, Tom Henry, Arthur Wonson and Alexander J. Smith.

E^b and Bass Clarinets, oboes and bassoons cannot be made in the United States to advantage except in a quantity which exceeds the demand here.[3] So Mr. Bettoney established in March 1930, as an experiment, a branch factory for making these instruments at Markneukirchen, Germany, which is a center of skilled musical instrument workers. A full line of woodwinds and "Silva Winds" are made there. They are adjusted, finished and tested in the main factory in Jamaica Plain.

1) Statement of Mr. Harry Bettoney
2) " " Mr. T. M. Carter, leader of Carter's band.
3) Same as footnote one

This company makes instruments of varying prices to suit all purses, supplying many for school use, the different grades being indicated by trade names. They also carry the necessary accessories and repair each kind of instrument.

In the woodwinds they make the following:

Flutes

C and D^b metal, Boehm system, with tone holes made by a patented process, three grades, both American and French models in the highest grade.

Piccolos

C and D^b, three grades, Boehm system, Bettonite and metal

Clarinets

Wood and Bettonite materials, Boehm and Albert systems, B^b, A, C, and E^b, 3 grades but not all in each pitch.

Metal--five grades in Boehm and three in Albert systems, B^b and A and E^b in the best grade, covered keys on two grades.

Alto E^b, metal, Boehm system, best grade only,

Bass B^b, " " " " " "

Oboes

Conservatory system two grades

Oboe-Sax

Oboe tone, sax fingering, Grenadilla wood

Bassoons

Paris Conservatory and Germany style models, maple-wood, hard rubber lined.

Figures are not available for the total number made to date of each kind of woodwind. The largest volume is in clarinets of which 6228 were made in 1931 as compared with 556 flutes and 174 piccolos.

Mr. Bettoney, knowing a player's difficulties with the cracking of ebony wood, has created Bettonite guaranteed against that for ten years.

Since September 1925 when he brought out a metal clarinet, patented March 21, 1929, the company has made only metal clarinets in all grades. These have been sold in all parts of the United States and many Bettoney clarinets have been exported to Europe in recent years.

A special hard white metal is used for the body of these. Among the special features are the following.

> It has a single metal tubular body with raised tone holes, $F^{\#}$ and F vent holes closed by fingers, and a G vent hole, closed by a cap carried on a lever which is pivoted on bearings. This has been the leader in popularizing the metal clarinet, which is made more accurately and played more easily than the wood clarinet.
>
> A patent for another invention, a new forked B^{b} for the Boehm system clarinet has been applied for.

"Silva-Bet" clarinets are used by many prominent bands including the National Guard, U. S. Army and U. S. Navy Bands, Washington, D. C. for their entire sections, and by artists like:

> Harold Babcock, Sousa Band, Erie, Pennsylvania
>
> Harry Baldwin, Philharmonic Orchestra, Los Angeles.

Rand L. Rand, Dornberger & Opera Club Orchestra, Chicago,

Thomas Hunter, People's Symphony, Boston.

Roy Schmidt, Symphony Orchestra, Detroit.

Jan A. Williams, New York Symphony and formerly Metropolitan Opera House Orchestra.

Rudolph Toll, player and teacher.

3. Miscellaneous Band, Orchestral & Other Instruments

Boston was perhaps pre-eminent about fifty years ago in connection with the manufacture of brass instruments. This was probably aided by the numerous bands of 1860 and 1870 namely Germania, Boston, Brigade, Bonds, Boston Brass, Hall's Boston Brass and Patrick Sarsfield Gilmore's famous band. This traveled all over the country, giving concerts. He conducted festivals for years. The climax of his career was the Great National Peace Jubilee held in Boston in 1869, to which President Grant and his cabinet, governors, army and navy officers and citizens came from all over the United States to hear the chorus of 10,000 voices and orchestra of 1,000 players. A later jubilee held in 1872 was not so successful because a chorus of 20,000 voices and orchestra of 2,000 were unwieldy. A little later there were a number of other bands.

E. G. Wright succeeded by the Boston Musical Instrument Manufacturers and Hall & Quimby were the leading manufacturers of brass instruments for many years in Boston.

The chief difference between their instruments and those of today is that the bell of the former was made out of flat stock hammered into shape. The workmanship compares favorably with that of any brass instruments of the same kind made today. They were used by the leading bands of the day like those just mentioned.[1]

The firms which have taken them over, the Cundy-Bettoney Company and the Vega Company, are ably maintaining their high standing.

1) Statements of Mr. Thomas M. Carter.

The Vega Co.

This business started in 1881 and specialized in fretted and plectrum instruments. About 1900 they took over a number of other companies, Standard Band Instrument Company established between 1880-1885 and Hall and Quimby, started as the Allen Manufacturing Company about 1860, also manufacturers of band instruments. As a result this is the only firm making just brass and fretted instruments. It is located at 155 Columbus Avenue.

This company's business is primarily manufacturing, of which about 60% is in fretted and plectrum instruments and 40% brass instruments. They make all kinds of brasses except French and bass horns and more models of trumpets than any other manufacturer in the United States, a total of about 1000 a year, and also steel strings. Their trumpets, trombones and fretted instruments are exported as well as sold all over the United States. To date they have manufactured over 96,000 banjos, 40,000 guitars, 40,000 mandolins, and 30,000 trumpets.

This firm has many patents for improved construction and tone of trumpets and fretted instruments.

Professionals like William Place, Walter Bauer and Guiseppe Pettine play their fretted instruments.

Their best trumpets are silver plated and are played by artists like Walter Smith and members of the Metropolitan Opera House Orchestra, Cleveland, Minneapolis and San Francisco Symphonies and Roxy and Paramount Theatre Orchestras.

This firm also imports low and medium priced violins and accesories, and jobs these and goods of other manufacturers at wholesale. They also sell at retail some three thousand items, and appraise, trade in, and repair all kinds of instruments.

A special feature is their band organization and service department for helping to organize and teach school and legion bands, drum corps and orchestras. They arrange for special teachers to do this on any basis desired by a director or music supervisor.

After taking over the H. F. Odell Company in 1925 they published the "Odell Edition" of fretted music for five years until November 1931 and its trade journal "Crescendo" till 1930.

George B. Stone & Son, Inc.

This firm was established at Roxbury, Massachusetts in 1890 by Mr. George Burt Stone who ~~has~~ had forty years of experience as band instructor, director, drum major and professional drummer in many musical and military organizations in the Eastern States. Practically from the start the business has had two major interests, drum manufacturing and a school for teaching the use of percussion instruments. After his son became associated with him Mr. George B. Stone devoted most of his time to writing on drum subjects and teaching, as principal of the Stone Drum and Xylophone School until he retired. Mr. George Lawrence Stone, who is an experienced professional player of percussion instruments, is now head of the company's manufacturing and retail business and its school located at 61 Hanover Street.

This firm makes all types of drums, except metal shell, mostly single tension. As the shells are solid rock maple steam-bent, not a veneer, they are guaranteed not to warp. The chief styles are:

snare drums - street-military and orchestra

tenor drums

scotch pipe band drums

bass drums - big band and orchestra

The Boston Symphony Orchestra uses a bass and two others of their drums. During the war period the company's entire output was taken by the government under a contract for military drums.

They also manufacture accesories such as drum heads, covers, cases and bags and specialize in hand-turned sticks, being one of the few manufacturers to make these.

This concern also sells drums and accesories and all the instruments of a percussionist outfit, singly and in combination at wholesale and retail, and outfits bands, largely school bands, and American Legion drum corps at present.

They recently brought out a "Mastercraft Drum" which is a patented innovation. There are two pivots inside the shell to loosen or tighten the rods, which go inside instead of outside, thus eliminating some of the wear on the drum heads. The basis of the patent is the ventilation allowing moisture to come out. The Marlborough, Massachusetts, American Legion band with this kind of drum won the ninth prize offered at the Detroit Convention.

Mail order and retail repairing, rebuilding and replacing of all kinds of percussion instruments and tuning Xylophones constitute and important department of the business.

The Stone Drum and Xylophone School has a staff consisting of Mr. George L. Stone and three instructors to give both individual and class instruction in playing drums, bells, xylophones, tympani and accessories. During the winter months they average one hundred students a month. Recently the instructors have been giving outside class instruction in rudimental drumming in schools and legion military drum corps.

This company also publishes instruction books –

Methods for drumming - rudiments and exhibition beats - such books as the "Dodge Drum Instructor for Drums and Bells" and "Military Street Beats" by George F. Stone.

Methods for bells, xylophone, chimes and tympani.

Technical studies and solos for these same instruments.

Charles A. Stromberg & Son

Mr. Charles A. Stromberg came to Boston from Sweden in 1887 and as foreman in a banjo, mandolin and guitar factory supervised the manufacture of some 3500 of these instruments. He started in business for himself about 1891, producing custom-made guitars, banjos, and snare, bass band and orchestra drums for professional and amateur players. The manufacturing is done at 40 Hanover Street.

To date they have made about 1000 banjos, 200 mandolins and 400 drums which have been shipped all over the United States and Canada, until a high tariff on musical instruments was put into effect there.

This firm also repairs all kinds of stringed instruments including harps. As he owns patents for casting the ornaments of harps, these instruments are sent to him from Canada and from as far west as California for rebuilding and restoring the ornaments and for repairing.

Mr. Stromberg and his son, being skilled mechanics, make their own tools for manufacturing. They have also developed several innovations and patents.

Their guitars are made of three layers of curly maple wood, a shaded exterior and an inlay bound with ivory. "F" instead of round holes are used in the swell front for better vibration. There is also an adjustable bridge for raising and lowering the strings and an adjustable tail piece sleeve for tightening the tension. Tenor guitars are most popular at present.

Their banjos have a pantented feature, the Stromberg Cupperphone Tone Chamber, consisting of a metal ring placed on a circular series of upright metal tubes or cups on a built-in wooden shelf, next to the rim and directly under the head. This receives and throws out the tone in great volume and makes it sustaining. Over five thousand of these have been sold in eight years' time. Various grades of these are made, the prices varying with the amounts of inlay, mother of pearl on the finger board, quadruple gold plated metal ornamentation, and hand engraving.

Some of the professional players using both Stromberg banjos and guitars are, Victor Mondello, Mal Hallet's Columbia Recording Artists, Mike Naples' Hotel Winnipeg Orchestra, Winnipeg, Canada; Sam Demar, Princess Hotel, Bermuda; Julian Anderson, Jansen's Hoffbrau Orchestra, New York; and banjo only, Pete Barton, banjo soloist, Chicago Illinois.

The "Stromberg Invincible Orchestra Drum" has patented features, aluminum rings with a floating head and an independent tightening device. The shell of this may be ornamented with pearl, gold, silver, and ivory. These drums have been made for about ten years.

Charles W. Homeyer & Co.

This firm introduced in 1925 and perfected to the present point in 1927 an inexpensive instrument called the "Oboette" for school children to learn oboe fingering and production of tone. The "Oboette Method" for playing was written by Francis Findlay of the New England Conservatory. About 500 of these non-profit making instruments have been sold without advertising all over the United States, thus helping to create Woodwind players and to develop an interest and knowledge of the oboe, much needed in school bands and orchestras.

During the World War this company performed the service of a clearing house in finding and reconditioning band instruments for army band training corps.

H. Schindler & Co.

This company was started in 1889 at 178 Tremont Street by Messrs. Hugo and Otto Schindler because their nephew, Paul Schindler, found it impossible to get satisfactory strings for his playing. It is now located in Jamaica Plain.

This firm is the oldest concern in the United States, specializing in strings for bow stringed instruments, though they have made them for banjos, guitars, harps and ukuleles also. They make the gut from sheep's intestines and wind it. No steel is used only silver, plated copper, pure silver, aluminum and formerly gold. They ship their strings all over the United States and to Europe.

Mr. Schindler was the first in the United States to make the aluminum wound violin "D" string, used by Mr. Carl Ondrydzeck of the Boston Symphony Orchestra for greater power as early as 1900.[1] This has gradually replaced the gut "D" string on 60% of the violins in Boston.[2]

C. Saladino & Sons

This company was established in Chelsea in 1919 and manufactures musical strings for stringed instruments and "Nofray" and "Evertite" Silk Tennis Strings.

They use for their strings, catgut, which is probably a corruption of the word "Kitgut," "Kit" meaning fiddle.[3] Starting with the raw materials they check their strings at each important point and test their finished strings continually. They ship abroad as well as to all parts of the United States.

1) Name of early user given by Mr. Schindler.
3) Saunders, H. R. The Heart of the Tennis Racket, International Sport and Motoring, August 1929.
2) Statement of Mr. Hugo Schindler.

SUMMARY.

As has been shown, the music industries of Boston have contributed materially to the advancement of music as an art in the United States through pioneering efforts, mechanical inventions, materials used, quality of their product, personal activities of heads of the firms or a combination of two or more of these factors. In the colonial days these were due to the efforts of individuals. As the country developed, companies founded by men of vision and ability took the place of the single skilled artisan and all around musician and specialized in one field pertaining to music.

Some of the firms no longer in existence made contributions which have either served as steppingstones for successors or been generally adopted with only slight improvements since. Practically all the present day firms have made some contribution. Since these have been described in detail from early days to the present, only the most outstanding contributions are mentioned here.

The pioneer general publisher is the Oliver Ditson Company. It has brought out unique publications without parallel in the United States or abroad, such as the "Musicians' Library", "The Analytic Symphony Series", "The Music Students' Library", and also pioneer publications like the "Philharmonic Orchestra Series" and "Mitchell's Class Methods" for the violin.

The Arthur P. Schmidt Company's most notable contribution is its early recognition of the ability of the Boston group of American composers, and publication of their major works.

In the educational field Ginn & Company was the pioneer publisher of a graded series of school music textbooks. A few years later Silver, Burdett & Company brought out the second series of school music books. These two firms with their summer schools for training music teachers were largely responsible for the rapid development of music in the schools throughout the country. With the addition of the American Book Company established a little later we have the three publishers of the most widely used series of school music books.

C. C. Birchard & Company ably supplemented these series and was a pioneer in publishing orchestral music with complete conductors' scores for school use. It has also published large orchestral works of ~~more~~ modern American composers.

B. F. Wood Music Company has earned a world wide reputation in its specialty of easy educational music for the piano. "Edition Wood" has become the second largest edition in the United States.

The E. C. Schirmer Music Company is noted for the quality of its catalog, particularly its vocal and choral music. Its choral selections are arrangements which have been used by such organizations as the Harvard Glee Club, the Radcliffe Choral Society, the Bach Cantata Club and the Bethlehem Club.

The development of boy choirs in Episcopal churches has become about largely since the Parish Choir's publication of music suitable for their use. McLaughlin and Reilly's publications similarly promote good music in Catholic churches.

The most noted music journals of Bostonian origin were those edited by John S. Dwight, called the "Father of Musical Journalism in America", and by Dexter Smith. The latter was especially noted as a writer of words for music, and "as a writer of song poems of a simple and popular character he has scarcely an equal".[1)]

Boston engravers and printers have been active from the earliest times, using newer and better methods as they have been developed, for the production of music publications by publishers of Boston and other places.

In the manufacture of pianofortes some of Boston's makers have been in the front ranks from the start. Among the earlier firms which stood high were A. Babcock, John Osborne, Timothy Gilbert & Currier, Brown & Hallet and Hallet & Davis Company.

Jonas Chickering is known as "the Father of the Modern Pianoforte" because of his invention of the full iron plate. Development of overstringing and the double agraffes are two other improvements contributed by this company. Jonas Chickering also did much to promote music through his support of Lowell Mason's efforts in public school music and through his financial backing of the Handel and Haydn Society and Boston Music Hall. Chickering Hall at Fifth Avenue and 18th Street gave New York City a centre for its musical life for twenty-five years.

Under the leadership of Henry F. Miller and his sons the Henry F. Miller Piano Company developed a fine art instrument.

1) A Hundred Years of Music in America. p. 406.

The Mason & Hamlin Company developed the reed organ to its peak in the"Liszt Organ". This same firm then devoted its attention to manufacturing pianofortes. By 1915 these were unsurpassed for concert use.

In pipe organ building the early makers like William Goodrich and Thomas Appleton and later makers like Simmons & Wilcox and George S. Hutchings have been in the highest ranks for quality. Now Hook & Hastings and the Aeolian Skinner Company have reputations of the highest. The last named firm in particular under the leadership of Mr. Skinner has made notable contributions to the tone of the American organ.

Since the early nineteenth century Boston has been a centre of high grade violin making. Ira. J. and Asa Warren White were the first real craftsmen. George Gemunder, Orin Weeman, J. Bonaparte Squier, Calvin Baker and Walter Solon Goss were fine successors. Firms of high standing today include P. Balzerson, Edmund F. Bryant, O. H. Bryant & Son, Trefflé Gervais, John A. Gould & Sons, Richard H. Turner, Weeman, Beal & Holmberg and C. F. Stanley in his particular field.

With the William S. Haynes Company as leaders and the Haynes-Schwelm Company and Verne Q. Powell, Boston is now the centre of high grade flute making in the United States and is unsurpassed elsewhere. The Cundy-Bettoney Company manufactures most kinds of woodwind instruments and makes a large share of the total production of clarinets in the United States. It is well known for its fine clarinets, which have helped to popularize the all metal instrument.

About fifty years ago Boston was noted for its brass instruments, chiefly through the products of the Boston Musical Instrument Manufacturers and Hall & Quimby. Their successors, the Cundy-Bettoney Company and the Vega Company, are today making good band instruments.

Further investigation would doubtless bring to light more contributions. But what is here presented indicates that the music industries of Boston have not been behind the city's artists, composers, conductors and teachers in their efforts to promote the advancement of the art of music in the United States.

A P P E N D I C E S

Addresses and dates
are subject to min-
or corrections.

APPENDIX I

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910.

Addresses from Boston Business Directories.	Names of Firms	Information about Their Pianofortes
1860 - 460 Washington St. 1870 - 490 " " 1890 - 224 Tremont St. & Lamartine St. 1900 - Lamartine St., cor. Wyman	Wm. Bourne & Co.	Wm. Bourne began to manufacture pianos in 1837 in Dayton, Ohio, which had a population of 1000, moved to Cincinnati in 1840 and to Boston in 1842. There he became a department foreman for Chickering. He started for himself in 1846. The firm went out of business about July 1911. Wm. Bourne was a good scale drawer. He drew the "51" scale which was used in squares by Chickering & Sons and by W. P. Emerson also. He was an excellent workman and a piano maker of real ability, inventing "an ingenious application of the square action damper",[1] and several patents of a general character. They used the English action only. Their squares were among the best made, but the uprights he and his son developed were not a success. By 1870 they also made grands.
1850 - 18 Avery St. 1880 - 581 Washington St.	John W. Brackett	Started in the 1850's and continued to between 1880-5. Was a good action maker and drew many scales. Chickering's scale drawer, Mr. Bowen, got many points from him for the "123" scales. He also attached organ pedals to pianofortes, the bass pedals being constructed in N. Y. This firm made only overstrung squares. Their "pianoee" was one of the smallest pianos made.

1) Spillane, Daniel -- History of the American Pianoforte, p.171.

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910

Addresses from Boston Business Directories.	Names of Firms	Information about Their Pianofortes
1881 - 1125 Washington St. 1890 - 5 & 7 Appleton St. 1900 - 621 Albany St. 1910 - Briggs Piano Co. 10 Thatcher St.	Charles C. Briggs & Co.	Mr. Briggs entered W. P. Emerson's shop in 1854 where he immediately rose to foreman. In 1861 he entered into partnership with Geo. M. Guild, in the firm of Geo. M. Guild & Co. After some years this was dissolved and he went into business with his son, C. C. Briggs, Jr., at 1125 Washington St., in 1881. As the business grew, they moved into more rooms at 5-7 Appleton St., erected for them. By 1900, the Briggs Piano Co. was at 621 Albany St. Its last year was 1918. "Mr. C. C. Briggs, Sr. was an expert scale draughtsman and he made many acoustic discoveries in relation to upright scales."[1] "This firm was among the first to develop the resources of the upright in America for general use."[2]
1860 - 354½ Washington St. 1870 - 9 Bowker St. 1890 - 55½ Sudbury St.	S. P. Brooks	This firm was started between 1850-60 and discontinued business between 1890-1900 Mr. Brooks, who had been an apprentice of Mr. C. C. Briggs, made popular priced pianofortes in a small way with a tuning device which was perfected for Mason & Hamlin.

1) Spillane, Daniel -- History of the American Pianoforte, p.174
2) Pauer, Ernest -- The Pianist's Dictionary, p.137

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910

Addresses from Boston Business Directories

Names of Firms

Information about Their Pianofortes

Brown & Hallet

This firm, consisting of Edwin Brown and Russell Hallet, who furnished the capital, started about 1835. "In 1838, Mr. Brown patented a method for damping the strings to produce the effects made possible by a shifting action, which limited the hammer action to striking one string."[1] "In 1843, he patented a grand action of a very complicated nature designed to insure more perfect repetition and taking in some principles of the French grand action which was used by Chickering & Sons subsequently. This contained several minor points in which many later action improvements were anticipated."[1]

In 1840 the Franklin Institute Fair Committee on Art Exhibitions bestowed highest honors on a Brown & Hallet among 21 pianofortes shown by important New York and Boston makers because "it is the smallest piano in the collection having only a keyboard of six octaves, but the tone is superior to all others. The patent soft pedal it contains is a very pleasing and effective innovation and entirely avoids the necessity of shifting the action to produce similar results."[1]

Around 1842 their good reasonably priced pianoforte was a real boon to music lovers who could not afford Chickerings and other standard makes.[1]

Mr. Brown retired in 1843 and became a department foreman for Chickering & Sons, who used successfully in their grands the Swiss combined with the Brown action.

1) Spillane, Daniel -- History of American Pianoforte, p.165

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910

Addresses from Boston Business Directories	Names of Firms	Information about Their Pianofortes
1850 - 509½ Washington St? 1860 - 385 Washington St.	Jacob Chickering	This firm was started comparatively soon after that of Jonas Chickering and went out of business between 1860-1870. It made a spindle leg, six octave, plain phlange-strung square.
1850 - 393 Washington St. 1870 - 395 " " 1880 - 595 " " 1890 - 174 Tremont St.	W. P. Emerson	This firm was established in 1849 by Mr. William P. Emerson who was a good business man and soon developed a large trade. "The first improvements of distinct value were introduced from this date (1854) forward by Mr. C. C. Briggs, who became in a large measure identified with the musical status of the Emerson Piano during his stay there."[1] They made squares, plain-strung first, then overstrung, uprights, "cottage", and finally grands. Their squares were among the best made, "scale 13" being a wonderful small square yet inexpensive. Those built from 1875 to 1880 had seven octaves and the last squares seven+a third octaves. After Mr. Emerson's death, the company went to pieces and Ellenwood & Moore, who ran the company for the estate, sold out to a new company about 1890 consisting of Mr. P. H. Powers, Pres., Orin A. Kimball, and Joseph Grames. This new company failed after Mr. Powers' death and was sold about ten years ago to the United Piano Co. of Norwalk, Ohio.

1) Spillane, Daniel -- History of the American Pianoforte, p.173

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910

Addresses from Boston Business Directories	Names of Firms	Information about Their Pianofortes
1885 - 383 Federal St. 1890 - Albany cor. Wareham 1895 - 181 Tremont St. (Warerooms) 1900 - Albany cor. Wareham 1915 - Albany cor. Wareham	Everett Piano Co.	This company, headed by Col. Moore, was started between 1883-1885 and discontinued business in 1918 or 1919. It made uprights.
	Edwin Fobes	Said to have been a pupil of Timothy Gilbert[1] and an apprentice of C. C. Briggs,[2] began manufacturing in 1843 largely popular priced instruments. "In 1853 he patented an improved vertical or upright piano of a peculiar kind. A full metal plate reached to the extreme top of the case over which the strings stretched. Meanwhile the wrest pins were driven down into the top of the case perpendicularly. The strings rested on rollers and in tuning the angle was therefore avoided.[1]
1862 - 556 Washington St. 1870 - 881 " " 1880 - 682 " " 1890 - 101 Bristol St.	George M. Guild & Co.[3]	The George M. Guild piano was first made in 1861, when Mr. C. C. Briggs became a partner. By 1870 this firm was succeeded by Church Guild & Co., consisting of Geo. M. Guild, Cephas Church, who furnished the capital, and Geo. Hews. In 1890 it was Guild Piano Mfg. Co. This went out of business between 1890-1895. Mr. Guild was a practical pianoforte maker and obtained numerous patents for mechanical improvements some of which were practical. Among these were his stringing and tuning scheme and his sounding board and back arrangement, an adaptation of an old theory, which was used in modified form by other firms.[4] These were well known as good inexpensive instruments.

1) Spillane, Danial -- History of the American Pianoforte, p.170
2) Spillane, Daniel -- History of the American Pianoforte, p.172
3) Listed in Ernest Pauer's "The Pianist's Dictionary", p.142
4) Spillane, Daniel -- History of the American Pianoforte, p.174

Other Boston Pianofortes Makers Arranged Alphabetically-Period 1840-1910

Addresses from Boston Business Directories	Names of Firms	Information about Their Pianofortes
1847 - 417 Washington St. 1860 - 409 " " 1870 - 272 " " 1880 - 436 " " and 700 Harrison Ave. 1890 - 179 Tremont St.	Hallet Davis & Co.	This new concern immediately succeeded Brown & Hallet in 1843. It consisted of Russell Hallet, George H. Davis and Henry Allen. Mr. Davis, who came from New Hampshire, acquired his knowledge of the pianoforte business when he first came to Boston. He withdrew before 1847 and formed a partnership with F. B. Hallet, as Hallet & Davis. "Their instrument became a standard instrument as early as 1851 when it vied with such well known ones as Nunns & Clark and Hall & Sons, N. Y.; F. Gilbert, Boston; Conrad Meyer, Philadelphia."1) At the New York Mechanics' Institute exhibition in 1853, a Hallet & Davis pianoforte was awarded a gold medal and praise from the committee which included Henry C. Watson and W. Vincent Wallace. This firm had many patents including "a suspension agraffe bridge" for insuring a more upward bearing and consequently a better quality of resonance and tone production in the extreme treble register."1) Among their other specialities were their grand action and movable keyboard (from Brown & Hallet?) Mr. Davis died in 1879. The company was incorporated in 1890 with G. Cook, W. D. Cook and E. N. Kimball, Mr. Davis' factory superintendent, as chief stockholders. The company was continued by the Conways of Chicago, large stockholders, under a finance corporation. In 1931 Jacob Doll & Sons of N. Y. controlled the company.

1) Spillane, Daniel -- History of American Pianoforte, p.170

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910

Addresses from Boston Business Directories	Names of Firms	Information about Their Pianofortes
	Hallet, Cumston & Allen - Hallet & Cumston - Brown & Allen and Russell Hallet & Co.	
1847 - 293 & 339 Washington St.		
1880 - 459 Washington St.		Hallet & Allen came into being at Mr. Davis' withdrawal from the first Hallet, Davis
1890 - 157 Tremont St. - Hallet Cumston & Co.		& Co. William Cumston, a practical pianoforte maker, was taken into the firm before 1847. He had a fine previous record as an inventor having patented in 1839 a damper improvement in squares. About 1850 Henry Allen withdrew and formed Brown & Allen with Mr. Edwin Brown. Mr. Henry F. Miller was trained in their factory, before Mr. Brown again returned to Chickering & Sons leaving Mr. Allen in business alone at 170 Tremont St. around 1870.
		Hallet and Cumston was formed in 1850 and continued to make a popular priced instrument until about 1900. Their earliest squares were plain strung, later ones overstrung. They were among the first to make uprights. Toward the end they made grands.
		Russell Hallet apparently withdrew and joined Henry Allen between 1860-1870, but was alone as Russell Hallet & Co. at 143 Tremont St. in 1870.
	George Hews or Hewes	
1847 - 395 Washington St.		
1850 - 355 Washington St.		
1860 - 324 " "		Mr. George Hews was listed as a music teacher in 1833 and 1834 Boston directories,
1870 - 379 " "		and appears in 1836 as a manufacturer. "In 1843 the firm consisted of George Hews,
1880 - 595 " "		Richard C. Marsh, and Nathaniel W. Tileston of Dorchester."[1] In 1870 they were advertising pianofortes, organs and melodeons at wholesale and retail, so they may have given up the manufacturing and been simply dealers by that time.[2] They went out of business between 1880-1885.
		"Their squares invariably contained a form of the Chickering whole cast plate made so as not to infringe. Their pianos occasionally won awards at the New York Mechanics Institute Fairs of 1847."[1]

1) Spillane, Daniel -- History of the American Pianoforte, p.171

2) Boston Directory Advertising Department, p.934

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910

Addresses from Boston Business Directories	Names of Firms	Information about Their Pianofortes
1860 - 4 Howard St.	J. S. Humbert Around 1860	Built a few good squares.
1850 - 296 Washington St. 1875 - 630 " "	A. W. Ladd	Mr. Ladd, an apprentice in Mr. C. C. Briggs' shop, was in business from about 1850 to between 1875-1880. He built only squares, first plain, then overstrung. The first plain strung were larger than the first Chickering plain strung squares.
1847 - 507 Washington St. 1860 - 324 " "	Wendell P. Marvin Between 1840-7 to between 1860-1870	
1855 - 575 Washington St. 1860 - 678 " " 1870 - 296 " "	Lorenzo Matt Between 1850-55 to between 1870-1875	An apprentice of C. C. Briggs and Co. Made a few popular priced squares.
1860 - 155 Harrison Ave. 1870 - 313 Washington St.	John E. McNeil Between 1855-1860 to between 1870-1875	
1860 - 514 Washington St. 1870 - 385 " " 1890 - 630 " " 1900 - 784 " "	Andrew M. McPhail & Co.	In an advertisement dated 1900[1]) this firm claimed a record of 61 years. It does not appear in the business directories until the decade of 1850. This firm made three styles of squares, one of which was called "star" and another "crown", from their scale names. These and their uprights had a good sale. The business was sold to two salesmen, Mr. Blake and Mr. Owen, who sold it to Lawrence Barry. It has not been officially dissolved, though its assets and name were sold to Mark Campbell. Pianos with this name have been made by Kohler & Brambach of New York for about three years.

1) See Boston Directory 1900 - Advertising Dept., p.2378

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910

Addresses from Boston Business Directories	Names of Firms	Information about Their Pianofortes
1860 - 702 Washington St. 1870 - 798 " "	Gustavus A. Miller & Co.	Mr. Miller was a German. He started making pianofortes between 1850-1860 and his business was auctioned off about 1872. He made overstrung squares only, which were not especially good or popular.
1890 - Dunlow Court, Roxbury.	Daniel Morris	He was trained as an apprentice of C. C. Briggs and made mainly a popular priced instrument from between 1885-1890 to between 1890-1900.
1885 - 32 George St., Roxbury 1890 - 157 Tremont St. 1900 - George, Gerard & Howard Sts.,Roxbury	New England Piano Co.	Mr. T. F. Scanlon was president of this company which started between 1880-1885. They made squares first, on the lines of the Emerson scale, and then uprights and were a large concern around 1890, making one of the lowest priced instruments. Between 1900-1910 they went out of business. This company and McLaughlin of the insolvent Smith American Organ & Piano Co., took over that company between 1900-1910. This latter company had begun to make pianofortes in 1884. In 1889 they exhibited their "Regal Piano" made on novel principles designed by H. W. Smith, and attracted much notice. It consisted of a method of tone qualification and piano case decoration, for the vibratory body of the piano was insulated from the case proper by the covering of the instrument all over with soft velvety material.[1] The New England Piano Co. essayed an organ, but without much success.
1890 - 122 Eliot St.	B. H. Phillips	Mr. Phillips advertised[2] that he had been fourteen years with Woodward & Brown and J. W. Brackett. He made upright pianofortes and attached pedals for organ practice to any make, and apparently was in business only a few years.

1) See Spillane, Daniel -- History of the American Pianoforte, p.306

2) Boston Directory 1890, Advertising Dept., p.1929

Boston Pianoforte Makers Arranged Alphabetically-Period 1840-1910

Addressed from Boston Business Directories	Names of Firms	Information about Their Pianofortes
1832 - 23 Temple Place 1847 - 355 Washington St. 1850 - 344 " "	Wilkins & Newhall	Levi Wilkins was a pianoforte maker at 23 Temple Place from 1832-1834 and a partner from 1835-1837 with Stephen L. Gould who had been alone at 7 Carver Street in 1833 and 1834. Daniel B. Newhall had apparently been a partner of Benjamin G. Wilder before forming a partnership with Newhall in 1837 or 1838. They went out of business between 1850-1860. They made overstrung squares and their instrument was known as the Newhall Pianoforte.
1847 - 497 Washington St.	W. P. Winchester & Co.	Before 1847 - out of business between 1850-1860. Made squares and uprights.
1860 - 364½ Washington St.	L. P. Woodward	Around 1860
1847 - 352 Washington St. 1860 - 387 " " 1880 - 592 " " 1885 - 175A Tremont St. 1895 - 200 " "	Woodward & Brown	Mr. Isaac Woodward was born and educated at Roxbury, N. H., and learned cabinet making at Keene, N. H. He came to Boston and in the case making department of Brown & Hallet acquired a thorough knowledge of pianoforte making. He started business as Woodward & Co. in 1843 and in 1845 took into partnership John Brown, a fellow workman at Brown & Hallet's a member of Mr. Edwin Brown's family. Mr. Woodward and others in the concern patented many improvements "from 1843 to 1890 all of which possessed some utility and value".[1] They made good full iron plate overstrung squares, but their uprights were unsuccessful.

1) Spillane, Daniel -- History of the American Pianoforte, p.169

Other Boston Pianoforte Makers Arranged Alphabetically-Period 1849-1910

Addresses from Boston Business Directories	Names of Firms	Information about Their Pianofortes
	Woodward & Brown continued	"Mr. Woodward's most distinguishing personal characteristic was his love of music. He was one of the oldest members of the Handel & Haydn Society and devoted himself to its art interests."[1] He died in Brookline in 1883. Sometime between 1885-1890 this firm was out of business though Mr. Spillane speaks of it as a going concern in his book published in 1890. The Woodward & Brown Piano Co. appears in the business directory around 1895 but was gone before 1900.
1870 - 494 Tremont St. 1880 - 608 Washington St.	George Woods & Co.	About 1870 to between 1880-1890. Worked earlier at Mason & Hamlin's. Made good pianos.

1) Spillane, Daniel -- History of the American Pianoforte, p.169

APPENDIX II

Other Boston Pipe Organ Builders Period 1830-1910

Addresses from Boston Business Directories	Names of Firms	Comments
	Gilbert & Butler Early firm	Built organ in Leominster Congregational Church, rebuilt by the Frazee Company and now in a Medford R. C. Church.
1871 - 2058 Washington St. 1890 - 27 Music Hall 1900 - Tremont Temple	George H. Ryder 1871 - bet. 1900-1910	Made one and two manual good mechenical action church organs. Factory was in Reading.
1870 - N. Grove St. cor. Cambridge	William Stevens 1830 to bet. 1870-1880	One of earliest organ builders of U. S. Church organs from $500-$20,000., tracker action. Built organs in nearly every church in Lowell, Mass. One organ there lasted 70 years showing its good quality. He also built the Stoneham, Mass., Congregational Church organ, rebuilt with electrical action. Possibly the Wm. Stevens of Stevens & Jewett who made organ harmoniums about 1860?
1887 - Reed's Block, 16 Thayer Place.	James E. Treat & Co. 1887-1920 Changed to Methuen Organ Co. around 1905	Mr. Treat was a voicer. He was associated with Mr. Searles from 1905-1920. Built organs in Great Barrington House and Grace Cathedral, San Francisco, 40-50 stops of such fine workmanship it took five years to build. Mr. Searles often gave difference between cost and what churches could pay.

APPENDIX III

Other Boston Reed Organ Firms-Period 1850-1910

Addresses from Boston Directories	Firms	Information about Their Instruments
1868 - 6 Avery St.	Boston Organ Co. 1868, became the New England Organ Co. in 1872, till bet. 1880-90	Made cheap organs.
1868 - 179 Washington St. 1880 - 2130 Washington St.	Wm. H. Gerrish 1868 to bet. 1880-90	Earlier a Mason & Hamlin salesman. Small serious maker of good organs and organist of one of the largest Masonic lodges of Boston. For publications see p.12.
1875 - 101 Bristol St.	C. B. Hunt & Co. 1875 to bet. 1880-90	Manufacturers of Bay State Organs. Firm C. B. Hunt and P. Kraus.
1879 - 57 Washington St.	Massachusetts Organ Co. 1879 to bet. 1880-90	
1900 - George, Gerard & Howard Sts., Roxbury	New England Piano Co. Bet. 1880-5 to bet. 1900-1910	Made cheap reed organs after taking over Smith American Organ & Piano Co. after 1900. Not very successful with them. See list of Other Boston Pianoforte Makers for information about their pianos, p.213.
1850 - 293 Washington St.	M. O. Nichols About 1850	
1860 - 511 Washington St. 1870 - Tremont St. opp. Waltham 1880 - 511 Tremont St. opp. Waltham 1900 - 136 Boylston St.	S. D. & H. W. Smith About 1853 to bet. 1900-1910 name changed to Smith American Organ Co. bet. 1870-80 & later to Smith American Organ & Piano Co.	This company was a close corporation in 1890 with Mr. S. D. Smith, Pres., Mr. H. W., Vice-Pres., Mr. E. W., brother of the second, Treas., and Geo. T. McLaughlin, Sec'y. Mr. S. D. & Mr. H. W. Smith, cousins, were both born at Enfield, Mass. 1830. Mr. H. W., whose father was a noted inventor, learned pianoforte making as an apprentice in the factory of Hill, Ryder & Sons.

Other Boston Reed Organ Firms-Period 1850-1910

Addresses from Boston Directories	Firms	Information about Their Instruments
	S. D. & H. W. Smith cont.	"This firm has for many years (1890) enjoyed a world-wide reputation as manufacturers of organs." "They have been in business over 37 years as reed organ makers, and during that period have been instrumental in promoting the growth of musical taste in this country in connection with that branch."[1]
		This house had a great many patents of significance in relation to the organ.[1] They advertised their organs as having "clear sweetness of tone that has passed into a proverb."[2]
		Started making pianos 1884.
1850 - 130 Leverett St.	Stevens & Jewett Before 1850-1855	Organ harmoniums.
1870 - 494 Tremont St. 1880 - 608 Washington St.	Geo. W. Woods & Co. 1870 to bef. 1880-1890	Earlier with Mason & Hamlin, made fine reed organs and pianos.

1) Spillane, Daniel -- History of the American Pianoforte, p.305
2) Musical Herald, January 1880

APPENDIX IV

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments About Them.
	Violins	
1890 - 99 Leverett St.	Peter M. Borg Around 1880	A player and rather amateur maker of inexpensive fairly good violoncellos.
Lynn, Mass.	Peter Cyr About forty years until 1931	Maker of good violins.[1]
Lynn, Mass.	Walter Solon Goss[2] Around 1888 to 1925+	Came from Maine and was one of the best Boston makers.[1]
1860 - 33 Court St. 1930 - 120 Boylston	Elias Howe[3] Bet. 1850-1860 to 1931	Retail store for music and instruments, importing, publishing, repairing of stringed instruments and collecting of old violins.
1900 - 47 Hanover St.	Geo. W. Marquardt[4] Around 1900	Violin maker and repairer of double basses and violoncellos.

1) Statement of Mr. A. J. Oettinger, Musicians' Supply Company.
2) Listed in Willibald, Leo -- Die Geigen und Lautenmacher, p.231.
3) Listed as an American Violin maker in Bachmann, Alberto - An Encyclopedia of the Violin, p.54.
4) Same as note 2, but p.408

APPENDIX IV

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them.
	Violins	
1900 - 25 Winter St. Rm. 9 1905 - 608 Columbus Ave.	Freeman A. Oliver Bet. 1890-5 to 1905-10	A violinist, Lind, who worked for him, made many violins not highly spoken of.
1900 - 86 Court St.	Clark Powers Bet. 1890-5 to bet. 1900-5	Dealer, repairer and maker of a few fair instruments. Mostly imported and refinished violins.
	David Bailey Rockwell About 1876	Came from Maine. A real artist maker of violins.[1]
1890 - 339 Washington St.	J. Bonaparte Squier[2] & Company Bet. 1885-90 to 1905-10	Shoe pattern maker. Came from Michigan to Lewiston, Me., where he became interested in violins. Was a master violin maker and repairer.[1] His son, Vincent, who worked with him, now has his business in Battle Creek, Michigan.
1878 - 86 Tremont St. 1880 - 177 Washington St. 1888 - 578 Washington St. 1890 - 523 Washington St. 1905 - 749 Washington St.	Thompson and Odell 1878 to about 1905	Had a retail store, were instrument importers, putting on their name, and publishers. Calvin Baker in charge of their repair department made good violins, violas, violoncellos and double basses for them and for himself up to about 1915.

1) Statement of Mr. A. J. Oettinger
2) Listed in Die Geigen und Lautenmacher, p.607

APPENDIX IV

Other Boston Makers Of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms Violins	Kinds of Instruments Manufactured and Comments about Them.
1850 - 52 Court St. 1867 - 86 Tremont St.	Asa Warren White[1] in business with older brother Ira J. around 1850. Alone later.	Good violin maker like his brother, Ira, J.
1870 - 83 Sudbury St. 1890 - 48 Hanover St. 1900 - 144 Friend St. 1905 - 15 Marshall St. 1908 - 44 Merrimac St.	Ira E. White From 1860-70 to 1908	Son of Ira J. White. Repairer of violins, harps, concertinas, melodeons.
1850 - 52 Court St. Then Malden and later Melrose	Ira Johnson White[1] From around 1835 to 1880 or 1890 probably.	First Boston master violin maker. See p.163 for further information.
1860 - 59 Court St. 1880 - 89 Court St.	James H. White Bet. 1850-1860, by 1880 became James H. & J. Henry White. 1890 J. Henry alone to 1914.	Violin and woodwind repairer and maker of violin strings, prompter of Germania orchestra.
1900 - 181 Tremont St. Room 32	Maurice White Bet. 1895-1900 to bet. 1905-10	A German maker of good violins. His name was originally Weiss. He made the instruments for E. Berliner's experiments.[2]

1) See p.163 for further information.
2) Statement of Mr. A. J. Oettinger

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them.
	FLUTES	
1850 - 115 Court St.	Theodore Berteling About 1850 for 2 or 3 yrs. Then in New York.	Good woodwind instruments, typically German. Made flutes and clarinets mostly to order.
1850 - 15 Hawley St. 1870 - 59 Court St.	Walter Crosby 1836-1874	Made Crosby fifes, which were popular, and flutes. Probably first Boston flute maker.
1890 - 30 and 48 Hanover St.	August Damm & Co. Bet. 1880-90 to bet. 1895-1900.	Repairer and flute maker. Brought E. H. Wurlitzer to Boston in 1886 or -7 from Germany.
1900 - 453A Washington St.	John C. Haynes & Co. 1894-1900	Amalgamated in 1900 with Oliver Ditson Company. Instruments of all kinds were largely made for them, Bay State being their trade name. Imported violins were graduated by them to produce proper tone. Their banjos and guitars were made by L. B. Gatcomb, their flutes by Wm. S. Haynes. All kinds of instruments were also repaired.
1867 - 13 Hawkins St. 1870 - 20 Court St.	Adolph G. Hüttl From 1860-70, became Hüttl and Fischer, to 1673	Maker of flutes and clarionets.

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them.
	FLUTES (cont.)	
1850 - 364 Washington St.	F. G. Schauffler & Co. 1850, became Schauffler & Lenkhardt from 1851-7, and John Lenkhardt to bet. 1860-70	Made flutes.
1900 - 48 Hanover St. Room 2	E. H. Wurlitzer Bet. 1890-1900 to about 1900. Taken over by Cundy-Bettoney Co.	Repairer of woodwind instruments. Worked 8 years for August Damm. Made grenadilla wood flutes and piccolos, solid silver flutes, a few oboes of grenadilla wood, and clarinets of cocoa or grenadilla wood, all to order. His flutes were Boehm system and had fine tone quality.[1] Some players of his flutes were Mr. Edward Franklin, Mr. Charles K. North, Mr. Maydens, and Mr. Frank Eaton.

1) Statements of Mr. William R. Gibbs.

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them
	BRASS INSTRUMENTS	
1870 - 71 Sudbury St.	Boston Musical Instrument Mfrs. 1844 - Successors bet. 1870-80 to E. G. Wright, located as follows: - 1842 - 115 Court St. 1847 - 8 Bromfield St. 1870 - 60 Sudbury St. Taken over by Cundy-Bettoney Co. 1919.	Manufacturers of brass instruments. Noted for their Three *** Star Cornets and Trumpets. Advertisement in 1900 reads - "Celebrated Band Instruments".[1] Advertisement in 1840 by E. G. Wright, D. C. Hall, and G. W. Quimby reads - "First prize silver medal awarded at the late Fair of the Massachusetts Charitable Association for a full set of brass instruments. First prize Gold Medal awarded at late Mechanics' Fair at Lowell. Invite attention to their new improved rotary and piston cornets as well as to their large assortment of brass, copper, German silver and silver instruments of superior quality of tone and finish. Repairs promptly made by skillful workmen."[1] Made as fine instruments as any of that time, mostly cornets.[2]

1) Boston Directory, 1900, Advertising Section, p.2380
2) Statement of Mr. Thos. M. Carter

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them
	BRASS INSTRUMENTS (cont.)	
1860 - Albany St.	Graves & Co. of Winchester, N. H. & Boston. Around 1860.	Makers of the "Key Bugle" played by Edward Kendall (1808-1861), at one time leader of the Boston Brass band.
1860 - 18 Harvard Pl. 1860+- 384 Washington St. 1870 - 62 Sudbury St. 1890 - 178 Washington St.	Hall & Quimby Started about 1860 as Allen Mfg. Co., became Allen & Hall, then Hall & Quimby by 1870, changed by 1880 to Quimby Bros. (B. E. and Geo. W.). David C. Hall was alone then. Both taken over by the Vega Co. about 1900.	"Manufacturers of rotary valve musical instruments of every description. Purchased stock and tools of Allen & Hall (late firm) and introduced new inventions."[1] "Manufacturers of all kinds of band instruments, brass band instruments (round, flat and piston valves)."[2] Made fine instruments, cornets, trumpets, trombones, French horns, E^b altos, baritones and tubas. David C. Hall was born at Lyme, N. H. about 1820, came first to Lowell and then to Boston. He was one of the most noted bugle players of the day along with Joseph Greene of Providence, R. I., and leader of Hall's Boston Brass Band.

1) Boston Directory, 1870, Advertising Section, p.1043
2) Boston Directory, 1880, Advertising Section, p.1261

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them
	BRASS INSTRUMENTS (cont.)	
1860 - 5 Water St. 1870 - 46 Portland St. 1880 - 13 Bowker St.	B. F. Richardson Bet. 1850-60, became Richardson & Lehnert by 1870, B. F. Richardson again by 1880. Out of business bet. 1890-1900.	Advertised "All kinds of the most approved styles with all the modern improvements made to order and warranted."[1] Manufactured brass instruments. Made good trumpets and trombones. Mr. Lehnert made fine Turkish and Chinese cymbals which had to be imported previously. Unfortunately, the secret of the specifications died with him.[2]
1890 - 62 Sudbury St.	Standard Band Instrument Company. Bet. 1880-85 to 1905-10.	Taken over by The Vega Co. about 1900. Made good brass instruments of all kinds.
	Thompson and Odell	See p. 6 and Appendix IV Violins, p.220
	E. G. Wright	See Boston Musical Instrument Company, Appendix IV p.224.

1) Boston Directory, 1860, Advertising Section, p.44
2) Statements of Mr. Thos. M. Carter.

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them
		OTHER INSTRUMENTS
1900 - 3 Tremont Row	A. L. Berry Bet. 1890-95 to 1900-05	Drum maker. Bought parts and put them together.
1900 - 169 Dudley St.	Blair & Baldwin Bet. 1895-1900 to 1900-05	Drum maker -- few.
1880 - 103 Court St.	Wm. Bauer - Around 1880	Maker of very lively snare and bass drums which stood up well in rain. Used by Boston Symphony players. Moved out West after a few years.[1]
100 Boylston St. (office)	The Choraleelo Co. 1908-1916	The Choraleelo is an instrument producing a sustained tone with the same general characteristics as that of the tuning fork. The vibrations are produced by electro-magnets, whose pulsations are of the same periods as those of the bodies to be set in motion. The sources of sound may be piano strings or ribbons of steel drawn over a soundboard, bars of wood, aluminum or steel, somewhat like a Xylophone, used in connection with resonators, or

1) Statements of Mr. Ernest M. Skinner

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them
		OTHER INSTRUMENTS (cont.)
	The Choralcelo Co. (cont.)	specially constructed diaphragms fastened to the ends of resonant tubes. In the first case each string is set in vibration by the direct action of the magnet behind it giving continuous impulses as long as the note is held. In the other cases soft iron armatures attached to the bars and diaphragms are set in vibration by the magnets, thus moving the air in the resonators. The overtones are provided by sound corresponding generators. Sometimes an instrument with strings is connected by a wire to one of bars as an echo. The tones produced are clear, vibrant, beautiful and of great carrying quality. "The combinations of such sounds produce unique tonal effects of remarkable musical quality and the possibilities of synthetic tone development are great."1) A Choralcelo was installed in the restaurant of Edward A. Filene's store when it was opened and has been in use ever since. As yet this instrument has not fulfilled expectations and predictions of its possibilities, perhaps because it is heard to advantage in such large quarters.

1) Miller, Dayton C. -- The Science of Musical Sounds, p.189

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them
	OTHER INSTRUMENTS (cont.)	
1870 - 687½ Washington St. 1890 - 294 Shawmut St.	George C. Dobson From 1860-70 to 1870-80 and around 1890	Banjos and guitars
1890 - 145 Columbus Ave. & 178 Tremont St. 1900 - 27 Beach St. 1900 - 179 Tremont St.	Fairbanks & Cole Bet. 1880-90, became A. C. Fairbanks and Co. In 1900 W. T. Cole was at Tremont St.	Banjo makers
1890 - 691 Washington St.	Robert F. Freeman[1] About 1890	Guitars
1890 - 58 Winter St.	L. B. Gatcomb & Co. About 1890	Banjos and guitars
1890 - 139 Border St.	Chester B. Holway About 1890	Zither manufacturer
1890 - 89 Court St.	W. A. Judkins[1] About 1890	Zitherns

1) Possibly a dealer, not manufacturer.

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them
	OTHER INSTRUMENTS (cont.)	
1890 - 62 Sudbury St.	J. F. Luscomb[1] About 1890	Banjos
	Musicians Supply Company	See Violin Makers p.173
1900 - 24 Tremont Row	John A. Palm Bet. 1890-1900	Advertisement reads - "Makers of high grade mandolins and guitars, violins, zithers, banjos, strings and findings at lowest prices. Music instruction books. Repairing promptly attended to."[2]
1847 - 323 Washington St. 1850 - 17 Boylston Sq.	Henry Schatz[3] About 1847 to bet. 1860-70	Guitars and violins
1880 - 178 Washington St.	Whitmore (Osceola) & Boris. Around 1880	Made some good drums. Was the first firm to import buffet clarinets. Mr. Whitmore was a good clarinet player. He could also play a good saxophone.[4]

1) Possibly a dealer, not manufacturer.
2) Boston Directory, 1900, Advertising Section, p.1914
3) Possibly a dealer.
4) Statement of Mr. William R. Gibbs.

Other Boston Makers of Musical Instruments Excepting Pianofortes and Organs

Period 1850-1910

Addresses Given in Boston Business Directories	Names of Firms	Kinds of Instruments Manufactured and Comments about Them
	OTHER INSTRUMENTS (cont.)	
1890 - Abattoirgrounds, Brighton, Mass.	M. Woodman About 1690	Drum manufacturer.

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